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**AD HOC WORKING GROUP ON LONG-TERM COOPERATIVE ACTION  
UNDER THE CONVENTION**

**Seventh session**

**Bangkok, 28 September to 9 October 2009, and Barcelona, 2–6 November 2009**

**Item 3 (a–e) of the provisional agenda**

**Enabling the full, effective and sustained implementation of the Convention through long-term cooperative action now, up to and beyond 2012, by addressing, inter alia:**

**A shared vision for long-term cooperative action**

**Enhanced national/international action on mitigation of climate change**

**Enhanced action on adaptation**

**Enhanced action on technology development and transfer to support action on mitigation and adaptation**

**Enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation**

**Reordering and consolidation of text in the revised negotiating text**

**Note by the secretariat**

*Summary*

This document contains reordered and/or consolidated sections of the revised negotiating text (FCCC/AWGLCA/2009/INF.1) prepared by facilitators during and after the informal meeting of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA) held in Bonn, Germany, on 10–14 August 2009.

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## Introduction

1. The Ad Hoc Working Group on Long-term Cooperative Action under the Convention (AWG-LCA), at its sixth session, had before it a negotiating text prepared by its Chair.<sup>1</sup> At that session, Parties provided general comments on the structure and content of the negotiating text, stated reservations and objections to elements of the text, and proposed additions and modifications. The incorporation of this input resulted in the revised negotiating text.<sup>2</sup>
2. The revised negotiating text was considered at the informal meeting of the AWG-LCA held in Bonn, Germany, on 10–14 August 2009. Informal groups and sub-groups were set up to work on different sections of the text with a view to modifying it in the direction of consolidation and convergence. This document reflects the results of that work, as well as subsequent work undertaken by the group facilitators. This document does not, however, replace the revised negotiating text, which remains on the table.
3. Based on the exchanges among Parties during the August meeting, facilitators proposed how elements of the revised negotiating text could be reordered and consolidated in order to make the text more manageable. In some cases examples were made available in the form of non-papers; in other cases the proposed approach was presented to the groups in more general terms. At the end of the informal meeting, an understanding was reached that the facilitators, on their own responsibility, would reorder and consolidate the respective parts of the revised negotiating text in preparation for the first part of the seventh session of the AWG-LCA.
4. Annexes I to VI to this document contain suggestions for reordering and consolidating elements of the revised negotiating text, prepared by the facilitators during and after the informal meeting. Each annex has independent paragraph numbering. Paragraphs can be traced back to the revised negotiating text and to their sources with the aid of the background tables contained in document FCCC/AWGLCA/2009/INF.2/Add.1. These tables also contain information on the approach taken to the reordering and consolidation in each case.<sup>3</sup> Notes on the sources of the revised negotiating text can be found at the UNFCCC website.<sup>4</sup>
5. Facilitators were in some cases requested to prepare further background material suggesting ways to advance on revising the text during the first part of the seventh session of the AWG-LCA. Such material is contained in document FCCC/AWGLCA/2009/INF.2/Add.2.
6. The annexes to this document also reproduce the proposals contained in the revised negotiating text on the structure of the text and on the placement of elements within the text, with the exception of those proposals that have been implemented as part of the suggested reordering or consolidation. Cross-cutting structural proposals are contained in annex VII to this document.
7. Additional input on the revised negotiating text received from Parties during or shortly after the informal meeting in August is contained in document FCCC/AWGLCA/2009/INF.1/Add.1.

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<sup>1</sup> FCCC/AWGLCA/2009/8.

<sup>2</sup> FCCC/AWGLCA/2009/INF.1.

<sup>3</sup> In some cases there are also additional tables containing analysis by the facilitators.

<sup>4</sup> < <http://unfccc.int/meetings/items/4381.php> >.

## **Overview of the contents of FCCC/AWGLCA/2009/INF.2 and Add.1 and 2**

### **FCCC/AWGLCA/2009/INF.2\***

1. Document FCCC/AWGLCA/2009/INF.2 contains suggestions for reordering and consolidating elements of the revised negotiating text, prepared by the facilitators.

Introduction

Annexes:

- I. A shared vision for long-term cooperative action
- II. Enhanced action on adaptation and its means of implementation
- III. Enhanced action on mitigation
  - III A. Mitigation [commitments] by [developed country Parties]
  - III B. Nationally appropriate mitigation actions by developing countries
  - III C. Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries
  - III D. Cooperative sectoral approaches and sector-specific actions
  - III E. Economic and social consequences of response measures
- IV. Enhanced action on the provision of financial resources and investment
- V. Enhanced action on development and transfer of technology
- VI. Capacity-building
- VII. Cross-cutting proposals related to structure and placement

\* Unofficial translations of this document will be issued in Arabic, Chinese, French, Russian and Spanish.

### **FCCC/AWGLCA/2009/INF.2/Add.1**

2. Document FCCC/AWGLCA/2009/INF.2/Add.1 contains background information on the sources of the paragraphs contained in annexes I–VI to the parent document listed above and on the approach to the reordering and consolidation of text.

### **FCCC/AWGLCA/2009/INF.2/Add.2**

3. Document FCCC/AWGLCA/2009/INF.2/Add.2 contains additional input prepared by the facilitators before the seventh session of the Ad Hoc Working Group on Long-term Cooperative Action under the Convention.

Annex I

**A shared vision for long-term cooperative action**

This annex contains text from paragraphs 1–17 (pages 5–21) of the revised negotiating text (FCCC/AWGLCA/2009/INF.1), as reordered and consolidated by Parties and the facilitator of the informal group on shared vision. The approach to consolidation emerged from informal exchanges among Parties and was presented to the informal group on shared vision for proposals for preambular paragraphs 1–6 and paragraphs 1–4. After the informal meeting, the same approach was applied by the facilitator to the remaining proposals.

Paragraphs have been renumbered starting from 1, with preambular paragraphs identified by inserting PP in front of the paragraph number.

Paragraphs can be traced to their origin by using the explanatory table contained in annex I to document FCCC/AWGLCA/2009/INF.2/Add.1.

Structural proposals:

1) *The process of reviewing overall progress towards the ultimate objective of the Convention and actions related to mitigation, adaptation and means of implementation should be consolidated in a proposed new chapter for cross-cutting issues.*

2) *The range of emission reductions in paragraphs 31 (a) and 34 (a) should be removed from the shared vision chapter and treated in the mitigation chapter.*

3) *The shared vision is expressed:*

*Option 1: As a COP decision;*

*Option 2: As part of the COP decision that adopts an implementing agreement;*

*Option 3: As a chapeau to the implementing agreement;*

*Option 4: As the first section of the implementing agreement.*

PP.1 Recalling the Bali Action Plan adopted by decision 1/CP.13 of the Conference of the Parties to the Convention at its thirteenth session, and the need for long-term cooperative action among all Parties to enable the full and sustained implementation of the Convention now, up to and beyond 2012, in order to achieve its ultimate objective.

PP.2 Acknowledging the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) and more recent scientific information, that delay in reducing emissions significantly constrains opportunities to achieve low stabilization levels and increases the probability of severe climate change impacts and the consequent need for, and cost of, adaptation,

PP.3 Acknowledging the important role of the Kyoto Protocol in contributing to the ultimate objective of the Convention, and the need to broaden the legal commitments under the Convention. Substantial reductions of GHG emissions from Annex I countries should be agreed,

PP.4 Recognizing the importance of early action and emphasizing the urgent need to accelerate both mitigation and adaptation actions,

PP.5 Renewing the political determination to ensure that the equitable development needs of present and future generations are properly addressed.

PP.6 Intending to renew and strengthen the global partnership through the creation of new levels of cooperation among Parties, according to the principles of the Convention.

PP.7 Affirming a Shared Vision of a long-term goal to equitably, successfully and coherently integrate the ambitious efforts of all Parties.

PP.8 [Recognizing that] sustainable development is the first priority for developing countries. Therefore, [that] our commitment to a low carbon society would have to be linked to our development priorities, in accordance with the provisions of the Convention.

PP.9 [Recalling that] the Rio principles, particularly the principles of [equity], common but differentiated responsibilities and respective [capabilities] [capacities] should guide the debates on shared vision.

PP.10 [Emphasizing that] it is fundamental that Annex I countries comply fully with the provisions as set out in 4.3, 4.4, and 4.5 as well as additional commitments on technology transfer and capacity-building.

PP.11 [Further emphasizing that] a shared vision does not include commitments for developing countries. It does, entitle technology transfer, capacity-building and financial resources for project implementation regarding mitigation national programs.

PP.12 [Recognizing that sustainable development that ensures capacity for] [A shared vision recognizes that] [adaptation to the adverse effects of climate change is the most important issue for] [the most vulnerable countries are] all developing countries, [particularly] low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change, [as stated in preambular text 19 of the UNFCCC].

PP.13 Recognizing that current and potential climate change impacts require a shift in the global investment patterns and that criteria for financing allocation shall clearly respond to the priorities identified by the international community, with climate change stabilization being one of these priorities.

PP.14 Acknowledging that current atmospheric concentrations are principally the result of historical emissions of greenhouse gases, the most significant share of which has originated in developed countries.

PP.15 Further acknowledging that developed countries have a historical responsibility for their disproportionate contribution to the causes and consequences of climate change, reflecting their disproportionate historical use of a shared global carbon space since 1850 as well as their proposed continuing disproportionate use of the remaining global carbon space.

1. [[[As assessed by the IPCC in its Fourth Assessment Report] Warming of the climate system, as a consequence of human activity, is unequivocal. [Global atmospheric concentrations of greenhouse gases have increased significantly because of human activities since 1750.]
2. Current atmospheric concentrations are principally the result of historical emissions of greenhouse gases, [the largest share of which has originated in] [originating from] developed countries [Parties].

3. Current per-capita emission in developed countries remain relatively high compared to those in developing countries, as noted in the Convention and by the IPCC. [The serious adverse effects of climate change, notably those on crop production and food security, marine and coastal ecosystems, coastal livelihood, water resources and human health, ecosystems as well as on housing and infrastructure,] [Climate change is having significant deleterious effects on the composition, resilience and productivity of natural and managed ecosystems, on the operation of socio-economic systems and on human health and welfare, including crop production, fisheries and food security, water resources, as well as on housing and infrastructure. These effects,] [Notably the effects on ecosystems, on the operation of socio-economic systems and on human health and welfare, including crop production, fisheries and food security, water resources, as well as on housing and infrastructure,] [The AR4 demonstrates clearly that negative impacts of climate change are already evident and widespread, in particular in vulnerable regions of the world, and are increasingly posing a risk to ecosystems, food production, the attainment of sustainable development and of the Millennium Development Goals as well as to human health and security] as well as insufficient access to a global atmospheric resource, are [becoming] a major obstacle to efforts to promote [sustainable] economic and social development [and to [reduce] poverty] [eradication] [promote poverty alleviation,] [which are the first and overriding priorities of all developing countries]. In order to build up their coping or adaptive capacity, developing countries must pursue these overriding priorities to the best of their abilities. The maintenance of healthy ecosystems and their services is necessary to maintain the life support system on earth in the face of climate change, providing food and livelihoods, contributing to human welfare and enabling sustainable economic development.

4. [Developing countries face not only the additional challenge of adaptation but also the need to put their economies on a sustainable path. All Parties agree that developing countries face serious adverse effects of climate change as well as threats to their future economic potential due to insufficient access to shared global atmospheric resources.]

5. Recalling that [besides adversely affecting all developing countries, climate change pose significant challenges to] [[the adverse effects of climate change will be felt most acutely by [those segments of the] [vulnerable countries and] [in developing countries, particularly in low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change and by the most fragile ecosystems and] population [particularly in] [within] developing countries who have contributed least to climate change but [who are already in vulnerable situations [owing to factors such as geography, poverty, gender, age, indigenous or minority status and disability]]].

6. These adverse effects [also] [further] [undermine the equitable development needs of present and future generations] [demand a more equitable utilization of the global atmospheric resource to reflect the needs of present and future generations], and have a range of direct and indirect implications for the full and effective enjoyment of human rights including the right to self determination, statehood, life, food and health and the right of a people not to be deprived of its own means of subsistence, particularly in developing countries.

7. With land use being linked to sustainable development, adaptation and mitigation, agriculture plays an important role, especially in the context of food security and poverty reduction. Therefore, adaptation as well as mitigation efforts in the AFOLU sector are required to enable substantial increase in production and productivity needed for ensuring food security. Reducing GHG emissions in agriculture is a challenging task and may thus require attention in the context of any shared vision for long-term cooperative action.

8. Deep cuts [by developed countries] [by all Annex I country Parties] [by all developed countries] in global emissions by Parties in accordance with their historical responsibilities, as well as the principles

of equity and common but differentiated responsibilities, and realistic changes in emission patterns [will be] [are urgently] required to prevent dangerous interference with the climate system and achieve the ultimate objective of the Convention. Early and urgent action by all countries on the basis of equity and according to their common but differentiated responsibilities and respective capabilities is necessary. [A] [Further] delay by Parties [in implementing their commitments to reduce] [reducing] emissions will increase their climate debt to the developing countries and significantly constrain opportunities to achieve lower stabilization levels of greenhouse gases (GHGs) and increase the risk of more severe climate change impacts. Avoidance of damage to SIDS and LDCs as a primary benchmark for assessing the adequacy of long-term cooperative action.

9. The shared vision for long-term cooperative action recognizes the strong link between adaptation and mitigation as well as the cross-cutting role played by financing, technology transfer and capacity-building. Failure to implement ambitious and immediate mitigation actions by developed countries will increase the need for adaptation in developing countries and therefore for financial support. At the same time, increased financial support and technology transfer to developing countries will help these countries in their implementation of NAMAs, reducing the risk of crossing tipping points that could result in abrupt climate change.

10. Led by developed country Parties, [an economic transition is needed [that shifts] [in order to adjust] global economic growth patterns towards a sustainable [low-emission economy] based on development of innovative technologies, more sustainable production and consumption, promoting sustainable lifestyles and [climate-resilient] [sustainable] development [while ensuring a just transition of the workforce]. The active participation of all stakeholders in this transition should be sought [, be they governmental, including subnational and local government, private business or civil society, including the youth and addressing the need for gender equity].] Those developing countries that were and are low carbon economies need sufficient financial incentives and appropriate technology transfer to keep avoiding GHG emissions in their path to sustainable development and to prevent adopting the high GHG emission trajectories of developed countries.

Alternative to paragraph 10:

[In the face of the grave challenge of harmonizing sustainable development with mitigation of climate change, all the Parties are in need of a paradigm shift towards low carbon development. However, there still is no model for low carbon paradigm shift. As mitigation is a result of paradigm shift towards low carbon development, a concrete roadmap for low carbon development, especially for developing country Parties, is urgently needed.]

11. The structure of the global economy has undergone profound changes since the entry into force of the Convention, and Parties' individual responsibilities and capabilities with it. Emissions and sources of capital are increasingly global, necessitating that all countries take action to achieve a low-emissions trajectory in order to meet the objective of the Convention.

Alternative to paragraphs 1–11:

[Recognizing the need to further enhance the implementation of the Convention through long-term cooperative action and that deep cuts in global emissions will be required in order to achieve its ultimate objective.

Noting the need to take account of future changes in the economic and social circumstances of Parties, as well as the constant evolution of scientific knowledge relating to climate change, its causes and effects.]

12. [All Parties should take mitigation actions under an enlightened sense of solidarity] [All Parties should contribute to the global effort to combat climate change], in accordance with their common but differentiated responsibilities and respective capabilities [– a spectrum of effort is envisaged]. All countries will need to develop comprehensive climate response strategies, in line with their individual responsibilities and capabilities, that achieve an emission trajectory to a low emission economy.



13. [[In this context,] developed country Parties [have committed to] [should] demonstrate that they are taking the lead in modifying [the] long-term trends in emissions [reduction] consistent with the objective of the Convention [and in accordance with its provisions and principles.] In doing so, Annex I Parties pledge to meet their targets fully, effectively and in a measurable, reportable and verifiable manner.

14. [In reflection of] [Because of] their historical responsibility for the accumulation of greenhouse gas emissions in the atmosphere, [developed country Parties [and other Parties included in Annex I of the Convention] [must] [should] [show leadership] [in the global effort to build a low-carbon economy that ensures continued growth and sustainable development and strengthens capacity to adapt to the impacts of climate change] [shall take the lead in combating climate change] [and the adverse effects thereof] [in] [by] [in particular on taking corresponding measures in] [mitigation] [in taking on ambitious economy-wide quantified emission limitation and reduction] commitments [immediately implementing ambitious and legally binding emissions reductions] [through deep reductions in their emissions.] [or actions.] Developed country Parties and other developed Parties included in Annex II of the Convention [should] [must] [shall fulfill their commitments under the Convention in] supporting all developing country Parties, particularly the most vulnerable, in undertaking adaptation measures and enhanced nationally appropriate mitigation actions (NAMAs), in a measurable, reportable and verifiable manner, and in [assisting] [providing support] [enabling] them through the [provision of] [transfer of] technology cooperation and transfer and capacity building and financial resources [that help these countries] to move towards a low-emission development path.

15. [All Annex I Parties also agree to present Carbon Neutral Strategies (CNS) containing their vision to meet their quantified targets by 2020. This plan by all Annex I Parties, will act as a transparent modality in meeting the Annex I Party individual targets to reduce greenhouse gas emissions. It will outline a mitigation policy in totality as well as measures how it will meet its targets and stay on track.]

16. [Developing countries will also contribute to a global mitigation effort in accordance with the Convention, including through nationally appropriate mitigation actions.] [The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to finance and transfer of technology.] [All Parties agree that to the extent developing countries are expected to take NAMAs would hinge on the extent to which they are provided financial resources aided by vital technology transfer and development and that the NAMAs by the developing country Parties and the provision of finance and technology shall both be measurable, reportable and verifiable.] [Developing countries could adopt bolder measures of mitigation if developed countries make even deeper cuts in their own domestic emissions and provide adequate means of implementation. Furthermore, deeper cuts would create a demand for expanded carbon markets that should go hand in hand with significantly increased access to the project mechanisms to carbon trading schemes, and an early and enhanced role of forestry in the carbon markets.]

17. [All Parties should aim to undertake a similar level of effort to others at a similar level of development and with similar national circumstances.] [Developing countries] [Those Parties] whose national circumstances reflect greater [responsibilities] [responsibility] and [capabilities] [capability] [must contribute to the effort] [should make a greater contribution to the global effort] to address climate change, including for limitations of emissions and enhancement of removals of greenhouse gas emissions and in assisting the most vulnerable Parties and populations to adapt to climate change.]]

18. Developing country Parties over riding priority remains sustainable economic growth and poverty eradication, an effort which has been complicated by the effects of climate change. Special attention should be given to the [[urgent and immediate adaptation needs of [all] developing countries, [especially those] [that are] [particularly] [vulnerable to the adverse effects of climate change [as stated in preambular 19 of UNFCCC and the adverse effects of response measures,] [particularly low-lying and

other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems,] [and SIDS and LDCs] [require special attention] [must be met]] [, necessitating a shared vision for actively promoting sustainable community-based ecosystem management, conservation and restoration activities, where appropriate to support adaptation.] [Among adaptation actions are those necessary to restore the resilience of ecosystems and their productivity to enable sustainable economic development.]] [Those Parties whose national circumstances reflect the least capability and the most vulnerability to the adverse effects of climate change should be prioritised for support in their efforts to adapt to the adverse effects of climate change.] [The healthy marine and terrestrial ecosystems and their services are required to sustain the life supporting system on earth, providing food and livelihoods, contributing to human welfare and enabling sustainable economic development.] [It is important to stress the need for sustainable coastal and marine ecosystems that will increase the resilience to climate change. An integrated coastal and ocean management approach is a key in promoting resilience, and thus fundamental to preparing for and adapting to the effects of climate change on the ocean.] [[Countries] [Developing country Parties] lacking sufficient capacity to respond to the challenges of climate change require access [to opportunities to obtain this capacity] [to resources] in a timely [sustained and cooperative] manner.]] [Measurable, reportable and verifiable financing, technology transfer and compensation must be provided by developed countries to address the full costs of adaptation in developing countries, supported by appropriate institutional arrangements under the Conference of the Parties.] It is also particularly important to provide adequate, predictable, stable, sufficient and timely funding for adaptation purposes particularly by developed countries. Developed country Parties shall support these developing countries in meeting the costs of adaptation.

19. The shared vision for long-term cooperative action shall be guided by the ultimate objective of the Convention and its principles. [The urgent need to [confront] [prevent] dangerous climate change requires [political determination] [leadership] to [continue building an inclusive, fair and effective [climate regime] [implementation of the Convention], one that takes into account the integrity of the climate regime and the [need of developing countries' need] [needs of developing countries and their need] for adequate and equitable sustainable development [space] and the particular vulnerability of SIDS and LDCs, and is based on a [[new and] equitable] [genuine] [strengthened] global partnership that [drives] [enhances] [long-term] cooperative action to] [address existing implementation gaps, ensure effective implementation by all Parties with their commitments and] [address the existing implementation gaps especially in the implementation of commitments taken under Article 4 of the Convention] enable the full, effective and sustained implementation of the Convention now, up to and beyond 2012.] Scientific evidence shows that the global costs of mitigation and adaptation to the adverse effects of climate change will soar if mitigation efforts are timid, fragmented and restricted. Furthermore, it shows that the economics of ambitious and bold mitigation action pays better than shy efforts, both at a global and domestic level in developed and developing country Parties.

20. In order to fulfill this shared vision, Parties have agreed to establish a coherent, cohesive and integrated system of financial and technology transfer mechanisms under the Convention and a follow up/compliance mechanism. These institutions are robust and effective.

21. [The shared vision [for] [is of] long-term cooperative action, including the long-term global goal for emission reductions, [shall be guided by the ultimate objective of the Convention and its provisions and the principles] [to achieve the ultimate objective of the Convention and ensure its full, effective and sustained implementation, in accordance with its provisions and principles], recognizing that their application as regards individual Parties should evolve, in particular the [principles of [on the basis of equity and of common but differentiated responsibilities and respective capabilities, as well as the precautionary principle and state responsibility [, that are enshrined in the Convention] to guide the international community in addressing climate change], in particular articles 3.2, 3.3 and 3.5 of the Convention. [It also] [takes] [taking] into account environmental, evolving national circumstances, including social and economic [and political] conditions [, the specific needs and special circumstances

of developing countries, precautionary approaches, the right to development and sustainable economic growth] [and other relevant factors]]] [as reflected in the Convention], and ensuring that global crises, such as the financial crisis, should not constitute an obstacle to the provision of financial and technical assistance to developing countries in accordance with the Convention.

22. [The shared vision for long-term cooperative action [shall guide short- and midterm urgent and enhanced action on adaptation and mitigation, including support through finance, technology, and capacity-building] [aims to address climate change and achieve the mutually supportive and intertwined pillars of sustainable [and climate-resilient] development, that are economic development, social progress and the protection of the environment, as well as the survival of all states [and] to enhance action on adaptation, mitigation, technology, finance and capacity-building, integrating the means of implementation needed to support action in developing countries on adaptation and mitigation], in order to achieve the ultimate objective of the Convention and to achieve sustainable and climate resilient development.]

Alternative to paragraphs 21-22:

[The shared vision shall also be guided by the precautionary principle, that are enshrined in the Convention to guide the international community in addressing climate change and take into account social and economic conditions and other relevant factors. The shared vision for long-term cooperative action aims to achieve sustainable and climate-compatible development and to enhance action on adaptation, mitigation, technology, finance and capacity-building, integrating the means of implementation needed to support action on adaptation and mitigation, in order to achieve the ultimate objective of the Convention.]

Alternative to paragraphs 1-22:

Alternative 1

[The “shared vision for long-term cooperative action, including a long-term global goal for emissions reductions”, integrates the four building blocks of the Bali Action Plan in a comprehensive and balanced manner, that would enhance the full, effective and sustained implementation of the Convention, and achieve its objective as set out in Article 2 of the Convention, including its ultimate objective and the parameters for the achievement of this ultimate objective, that is “to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner” and to this end, shall:

- (a) fully recognize that the shared vision is to be pursued “in accordance with the provisions and principles of the Convention” (para. 1 a of the BAP), as contained in its Article 3, in particular Articles 3.1 (protection of the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities) and 3.3, and shall take into account “social and economic conditions and other relevant factors”, through the full consideration of the economic and social impacts on developing countries, including impacts on the eradication of poverty, of any long-term global goal for emissions reductions;
- (b) recognize the right to, and the promotion of, sustainable development, as stated in Article 3.4 of the Convention, “taking into account that economic development is essential for adopting measures to address climate change”;
- (c) address all the implementation gaps to enable full, effective and sustained implementation of the Convention, now, up to and beyond 2012, on mitigation and adaptation commitments, and in particular those related to the provision of financial resources (Article 4.3) and to the promotion and transfer of technology (Article 4.5), in the context of Article 4.7 of the Convention;

- (d) give urgent and equal weight to action on adaptation and mitigation and fully implement all relevant Articles of the Convention recognizing that as developed country Parties fail to meet their mitigation commitments, the costs of adaptation for developing country Parties would significantly increase, and fully implement Article 4.4 of the Convention;
- (e) envision a long-term goal which successfully integrates the means of implementation (technology, financing and capacity-building) to enable and support mitigation and adaptation actions of developing country Parties (Article 4.7), and one that would demonstrate “that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the Convention” (Article 4.2 (a)) through effective mechanisms and institutional arrangements.]

Alternative 2

The agreement on the shared vision for long-term cooperative action should address all aspects of the BAP and form the basis of a framework decision by the Conference of the Parties (COP), the scope of which should include:

- (a) The guiding principles and objective of the agreed outcome, including the scientific basis for decision making,
- (b) The quantified global goal of greenhouse gas emissions reductions agreed upon, for the short (2020) and the long (2050) terms, with the associated stabilization levels of greenhouse gases and global mean temperature rises. As well, the year of maximum global emissions and the differentiated contribution to the goal of all the groups of countries, Parties to the Convention and lead by developed countries,
- (c) The institutional framework and the contribution of the different groups of countries to the integration, implementation, monitoring and evaluation of the cooperative action on mitigation, adaptation, technology and financing.

The guiding principles of the Convention should support items b) and c) of the previous paragraph, in terms of common but differentiated responsibilities and respective capabilities; historical responsibilities in greenhouse gas emissions and the related historical ecological debt generated by the cumulative greenhouse gas emissions since 1750 and the most recent scientific information. The objective of the shared vision should be expressed as guidance to integrate the global cooperative action to enable the full, effective and sustained implementation of the Convention, from now, up to and beyond 2012. The previous should be linked to a series of more specific and mutually coherent agreements on the mitigation, adaptation, technology and financing issues, which should be respectively included in a series of COP decisions so as to complement the framework decision on the shared vision.

Alternative 3

The shared vision is to establish a global approach to addressing climate change through enhancing action by all countries to mitigate emissions of greenhouse gases and to provide adequate support for vulnerable countries to the impacts of climate change. Actions taken shall play a significant role in ensuring that global greenhouse gas concentrations in the atmosphere must be stabilized as far below 350 parts per million of carbon dioxide equivalent as possible, with temperature increases limited to as far below 1.5 degrees celsius above pre-industrial levels as possible. Action taken shall be a major contribution towards moving to a low greenhouse gas emission society that is compatible with sustainable development objectives and consistent with the principle of common but differentiated responsibilities and respective capabilities. The right to survival of all nations is a paramount objective.

Alternative 4

The discussion on a shared vision for long-term cooperative action is an exchange of views or ideas about how to enable the full, effective and sustained implementation of the Convention, focusing on the

way to implement long-term cooperative action under the framework of the Convention. A shared vision is for long-term cooperative action, such a vision should be guided by the ultimate objective of the Convention, which consists of the following three aspects: to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system; to adapt to the impacts of climate change; and to realize sustainable development. A shared vision for long-term cooperative action should be comprehensive and include mitigation, adaptation, finance, technology as well as sustainable development.

23. [Recalling Article 3, paragraphs 1 and 5, and Article 4, paragraphs 3 and 7 of the Convention, developed country Parties shall not resort to any form of unilateral measures, including countervailing border measures, against goods and services imported from developing countries on the grounds of protection and stabilization of climate.]

*Enhanced action on adaptation, mitigation, technology and financing*

24. There must be consistency between the global goal, mitigation commitments and actions by all developed country Parties and the provision by developed country Parties of technology, financing and capacity-building to support and enable nationally appropriate mitigation actions by developing country Parties. Should such enabling support be significant and consistent with needs, nationally appropriate mitigation actions by developing country Parties could achieve a substantial deviation from baseline and thus contribute to achieving the global goal. Should such enabling support remain insignificant, nationally appropriate mitigation actions by developing country Parties would remain limited, their greenhouse gas emissions would therefore increase accordingly and mitigation commitments and actions by all developed country Parties should then be increased to achieve the global goal without the contribution of developing country Parties.

25. The shared vision for long-term cooperative action recognizes the strong link between adaptation and mitigation as well as the cross-cutting role played by financing, technology transfer and capacity-building. Failure to implement ambitious and immediate mitigation actions by developed countries will increase the need for adaptation in all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change and therefore for financial support. At the same time, increased financial support and technology transfer to developing countries will help these countries in their implementation of NAMAs, reducing the risk of triggering/crossing tipping points that could result in abrupt climate change.

*A long-term global goal for emission reductions [(with related medium-term goals and review process)]*

26. Taking into account the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change, [the shared vision includes a long-term [aspirational] global goal for emission reductions that [is based on best available [science] [scientific evidence]] [and economic analysis] [takes into account robust scientific findings of the IPCC as accepted by the Parties] [recognizes the scale and urgency of the challenge as outlined in the IPCC AR4,] and [provides direction] intended to inspire long-term cooperative action, [making it sufficiently effective] to bring about the deep cuts in global emissions as well as realistic changes in emission patterns are urgently required to achieve the ultimate objective of the Convention [and minimize further climate change impacts on [vulnerable] developing countries as mentioned in preambular 19 of the Convention ]], that are particularly vulnerable to the adverse effects of climate change, especially the LDCs and SIDS particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change, with flexibility and diversity of nationally appropriate actions. The global goal for the reduction of greenhouse gas emissions should be

based on the most recent scientific knowledge, incorporating the ecological rationality of natural systems as one of its guiding principles, as this ultimately affects the dynamics of planet Earth and its climate, and to which the economic rationality should be subordinated. The emission reduction goals set for the short term and medium term should enable the fulfillment of this long-term goal.

27. [[The long-term global goal for emission reductions [shall] [should] reflect all elements of the Bali Action Plan, including mitigation, adaptation, finance and technology. It should be set] [In order to achieve the ultimate objective of the Convention as contained in its Article 2, the Parties shall work towards]

Option 1

[as a stabilization of GHG concentrations in the atmosphere at [400] [450 or lower] [not more than 450] [450] [least 450] ppm carbon dioxide equivalent (CO<sub>2</sub> eq) [and a temperature increase limited to] [so that there is a very low or low level of risk that the global mean temperature rise will be] 2 °C or below above the pre-industrial level [with a probability greater than 50 per cent] [, which requires reversing the trend of increasing global greenhouse gas emissions by 2020 at the latest]. For this purpose, the Parties [shall] [should] collectively [reduce global emissions by at least [50] [81–71] [85] per cent [from 1990] levels by 2050.] [set an emission reduction objective on the basis of historical responsibility and national circumstances.] ]

Option 2

[as a stabilization of GHG concentrations in the atmosphere well below 350 ppm CO<sub>2</sub> eq [and a temperature increase limited to below 1.5 °C above the pre-industrial level] [with a probability greater than 50 per cent of a temperature increase of less than 2 °C from pre-industrial level]. For this purpose, the Parties [shall] [should] collectively [reduce global emissions by [81–71] [more than 85] [at least 95] per cent from 1990 levels by 2050.] [set an emission reduction objective on the basis of historical responsibility and national circumstances.] ]

Option 3

[as a global temperature increase limited to 2 °C above the pre-industrial level.]

Option 4

[as a reduction in global average GHG emissions per capita to about 2 t CO<sub>2</sub>.]

Option 5

[on the basis of

Option 5.1

[historical responsibility and capacity and national circumstances.]

Option 5.2

[emissions debt.]

Option 5.3

[per capita accumulative emission convergence.] [The long-term global goal for emission reductions should be set as a statistically robust ceiling for the average global temperature increase strictly attributable to anthropogenic interference having a global effect, of [x] degrees Centigrade above mid-19th century levels, with per capita accumulative emission convergence between all Parties.]

Option 5.4

[an equitable allocation of the global atmospheric resources.]

Option 5.5

[sound science.]

Option 5.6

[economic and technological feasibility.]

Option 5.7

[supported and enabled by adequate technology, financing and capacity-building].]

Option 6

[The shared vision may include a long-term goal for global GHG emissions reductions of at least halving global emissions relative to 1990 levels by the middle of the 21<sup>st</sup> century, underpinned by ambitious mid-term targets, based on sound science and in accordance with the principles and provisions of the Convention.]

Alternative to paragraphs 26–27:

[The objective of this Agreement is to achieve an environmentally sound response to climate change through effective implementation of the Convention, with a view to achieving its ultimate objective as provided in its Article 2, by:

- (a) stabilizing atmospheric greenhouse gases at 450 parts per million carbon dioxide equivalent or lower, through unified long-term action that sets the world on a path by which global GHG emissions peak by [X] and then global GHG emissions reduce by [X] per cent by [X] on [X] levels; and
- (b) galvanizing greater attention and efforts towards adaptation at all levels to minimize the adverse impacts of climate change, to assist in building climate resilient communities and to enhance sustainable development.]

28. [Developed country Parties agree that they will, through their Carbon Neutral Strategy identify] [Emission pathways towards the long-term global goal for emission reduction require that global GHG emissions peak [between 2010 and 2013] [by 2015] [by 2020 at the latest] [in the next 10–15 years] [in the next 10–20 years]] and decrease thereafter, and the annual maximum reduction rate should be up to 4–5 per cent between 2015 and 2020. Developing country Parties should ensure that their emissions peak by 2025.

Alternative to paragraphs 27–28:

[All Parties should aim at a long-term goal of achieving at least fifty per cent reduction in global emissions of greenhouse gases from their current level by 2050, with a reference to scientific knowledge of the Intergovernmental Panel on Climate Change through realization of a low carbon society and development of innovative technologies. In order to achieve this goal, peaking-out of the global emissions of greenhouse gases in the next ten to twenty years, 2015 for developed countries and 2025 for developing countries, should be pursued and all Parties should share the vision on how to pave the way to reduce global emissions by 2050 with flexibility and diversity of nationally appropriate actions.]

29. Annex I Parties have agreed to clearly delineate their historical responsibilities and their respective contribution to the anthropogenic increase in greenhouse gas emissions. All Parties agree that this was crucial in our collective effort to combat the adverse effects of climate change. All Parties have further agreed that assigned amount calculated must reflect this historical contribution of the Annex I Parties in order to determine an equitable allocation of global atmospheric resources between the developed and the developing countries.

30. To this end, Annex I Parties shall ensure that [aggregate anthropogenic carbon dioxide equivalent emissions] [their emissions] do not exceed their assigned amounts, calculated to reflect the

full extent of their [historical responsibility and an equitable allocation of the global atmospheric resource.] [historical climate debt taking into account:]

- (a) Responsibility of Annex I Parties, individually and jointly, for current atmospheric concentrations of greenhouse gases;
- (b) The historical and current per-capita emissions originating in developed countries;
- (c) Technological, financial and institutional capacities;
- (d) The share of global emissions required by developing countries in order to meet their social and economic development needs, to eradicate poverty and to achieve the right to development.

31. [To this end, [developed country Parties] [Parties included in Annex I to the Convention (Annex I Parties)] [developed country Parties and other Parties included in Annex I to the Convention] [developed country Parties included in Annex II to the Convention (Annex II Parties)], as a group, [shall] [should] [reduce their [domestic] GHG emissions] [deeply cut their GHG emissions]:

- (a) [By at least 25–40] [By 25–40] [By more than 25–40] [In the order of 30] [By at least 40] [By 45] [By at least 45] per cent from 1990 levels by [2017] [2020], through domestic and international efforts [with further reductions to be achieved through policies and measures that promote sustainable lifestyles];
- (b) [And [in the range of 75–85] [by at least 85] [by at least 90] [by more than 95] per cent by 2050.]]

*Alternative to subparagraph 31 (b):*

[should transform their economies over the coming decades in order to collectively reduce their greenhouse gas emissions by 80–95 per cent by 2050 compared to 1990 levels.]

32. The difference between the assigned amounts of Annex I Parties and their actual GHG emissions shall be quantified [as an increase in their emissions debt/accumulated per capita emissions/use beyond their equitable allocation of the global atmospheric resources] [and shall provide the basis of] [as an input for the consideration of] fulfillment by Annex I Parties of their commitments to provide financing, technology and compensation to developing countries for mitigating and adapting to climate change.

33. In the light of a shared vision based on historic responsibility/emissions, debt/per-capita emissions convergence/an equitable allocation of a shared atmospheric resource, [and in accordance with the provisions of the Convention,] Annex I Parties shall provide new and additional financial resources to meet the full costs incurred by developing country Parties [in complying with their obligations under Article 12, paragraph 1, and the full incremental costs of implementing measures that are covered by Article 4, paragraph 1] [, particularly the most vulnerable countries including LDCs and SIDs, of meeting their commitments, towards the full, effective and sustained implementation of the Convention]. They shall also provide new and additional funding to cover the full incremental costs incurred by developing countries in implementing nationally appropriate mitigation actions undertaken in the context of sustainable development. Annex I Parties commit the amount of [ ] billion [Euros/dollars] in order to enable mitigation and adaptation actions in developing countries for the period now up to 2012. The [Conference of the] Parties shall periodically review the adequacy of levels of financing required to support mitigation and adaptation actions in developing countries, including a comprehensive review not later than 2011.

34. [Supported and enabled by technology, financing and capacity-building from developed country Parties, the GHG emissions of [developing country Parties][Parties not included in Annex I to the



Convention (non-Annex I Parties)], as a group, [shall] [should] [could] realistically change their emission patterns by :

- (a) [[Significantly deviate from the baseline by 2020] [Deviate in the order of 15–30 per cent below the baseline by 2020] [Deviating from the baseline by 2020];
- (b) [And] be reduced by 25 per cent from 2000 levels by 2050.]]

Alternatives to paragraph 34:

Alternative 1:

[Developing country Parties as a group, in particular the most advanced among them, shall achieve a substantial and quantifiable deviation in the order of 15–30 per cent below business as usual levels by 2020, respecting the principle of common but differentiated responsibilities and respective capabilities, supported and enabled by technology, financing and capacity-building.]

Alternative 2:

[Non-Annex I Parties should formulate and implement NAMAs in the context of sustainable development, in order to moderate the growth of GHG emissions to the extent commensurate with support provided, in terms of technology and finance, by developed countries.]

*Process of reviewing overall progress towards the ultimate objective of the Convention and actions related to mitigation, adaptation and means of implementation*

35. Option 1

[Parties shall periodically review the implementation by Parties of their commitments under the Convention, overall progress towards the ultimate objective of the Convention and actions related to mitigation, adaptation, finance, technology transfer and other means of implementation, in the light of [the best available scientific information] [, including an assessment of climate change and its impacts] [intergovernmental scientific] [the most up-to-date information released by the IPCC] [[as well as relevant technical, social and economic information,] [the most recent scientific information provided by the intergovernmental mechanism] and taking account of observed impacts and efforts made to adapt to climate change], bearing in mind the changes in circumstances of the Parties, including [a] comprehensive review [not later than 2016] [at least five years before the end of the commitment period], incorporating consideration of future emission reduction requirements and targets in the light of the [Fifth Assessment] [findings of the latest assessment] Report of the IPCC.]

Option 2 (*in the case of a long-term global goal as defined in paragraph 27, option 3, above*)

[The long-term global goal for emission reductions [shall] [should] be updated to reflect [progress in scientific knowledge] [inter-governmentally accepted scientific assessment of anthropogenic global climate change and its impacts]. [To allow for these updates, the 2 °C goal [shall] [should] be broken down into partial targets: initially, a 0.2 °C temperature increase per decade over 10 decades. Every 10 years, the partial target [shall] [should] be evaluated, with a view to possibly redefining it, taking into account [advances in scientific knowledge] [recommendations of the IPCC as agreed by the governments] and the reduction of uncertainties. In all cases, the probability of achieving the temperature goals should be greater than 50 per cent.]

Alternative to paragraph 35, option 2:

[This long-term target should be reviewed no later than 2015 and on a regular basis thereafter. Such a review must be informed by the experiences and observations of Parties, the findings of the IPCCAR5 and other relevant scientific information. The Conference of the Parties will be tasked with the responsibility of setting interim short-term targets and monitoring the achievement of these targets. In these reviews, adaptive risk management strategies, to compensate for shortfalls, should be utilized as

they allow for immediate progress and also permit for adjustment of strategies as actual outcomes and impacts in SIDS are observed. Where there are threats of serious or irreversible damage, the precautionary principle dictates that lack of full scientific certainty should not be used as a reason for postponing measures. In this context, the avoidance of further negative climate change impacts on SIDS must be one of the key benchmarks for assessing the adequacy of our long-term goal.]

### Option 3

The Conference of the Parties serving as the meeting of the Parties to this Protocol shall undertake reviews of this Protocol, including the consideration of commitments of the Parties for subsequent periods, in the light of the best available scientific information and assessments on climate change and its impacts, as well as relevant technical, social and economic information, bearing in mind the changes in circumstances of the Parties. The first review shall take place at least five years before the end of the commitment period, and further reviews shall take place at regular intervals and in a timely manner. Based on these reviews, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take appropriate action, which may include the adoption of amendment to Annex B (commitments by developed country Parties) and Annex C (actions by developing country Parties). The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session or as soon as practicable thereafter, identify elements, including the economic development stages, response capabilities and shares of greenhouse gas emissions in the world, to be considered as criteria for changes in circumstances of the Parties.

36. The new agreed post-2012 institutional arrangement and legal framework to be established for the implementation, monitoring, reporting and verification of the global cooperative action for mitigation, adaptation, technology and financing, should be set under the Convention. It should include a financial mechanism and a facilitative mechanism drawn up to facilitate the design, adoption and carrying out of public policies, as the prevailing instrument, to which the market rules and related dynamics should be subordinate, in order to assure the full, effective and sustained implementation of the Convention.

37. The new institutional arrangement will provide technical and financial support for developing countries in the following areas: (a) preparation, implementation and follow-up through monitoring, reporting and verification of nationally appropriate mitigation actions (NAMAs) by developing countries. These activities could include options to reduce emissions from deforestation and forest degradation (REDD); (b) preparation, implementation and follow-up of national adaptation programmes of action (NAPAs) or national communications in developing countries; (c) technology needs assessments (TNAs) for adaptation and mitigation under the NAMAs and the NAPAs or national communications of developing countries; (d) capacity-building and enabling environments for adaptation and mitigation in developing countries; (e) education, awareness raising and public participation, focused on youth, women and indigenous peoples; (f) design and implementation of adaptation programmes and projects; (g) support for all technological cycle phases: research and development (R&D), diffusion and transfer, including acquisition of technologies for adaptation and mitigation, including the purchase or flexibility of patents.

38. The scheme for the new institutional arrangement under the Convention will be based on three basic pillars: government; facilitative mechanism; and financial mechanism, and the basic organization of which will include the following:

- (a) The government will be ruled by the COP with the support of a new subsidiary body on adaptation, and of an Executive Board responsible for the management of the new funds and the related facilitative processes and bodies. The current Convention secretariat will operate as such, as appropriate.

- (b) The Convention's financial mechanism will include a multilateral climate change fund including five windows: (a) an Adaptation window, (b) a Compensation window, to address loss and damage from climate change impacts, including insurance, rehabilitation and compensatory components, (c) a Technology window; (d) a Mitigation window; and (e) a REDD window, to support a multi-phases process for positive forest incentives relating to REDD actions.
- (c) The Convention's facilitative mechanism will include: (a) work programmes for adaptation and mitigation; (b) a long-term REDD process; (c) a short-term technology action plan; (d) an expert group on adaptation established by the subsidiary body on adaptation, and expert groups on mitigation, technologies and on monitoring, reporting and verification; and (e) an international registry for the monitoring, reporting and verification of compliance of emission reduction commitments, and the transfer of technical and financial resources from developed countries to developing countries. The secretariat will provide technical and administrative support, including a new centre for information exchange.

Alternative to paragraph 1-38

[The shared vision shall take the form of preambular text that encapsulates both the long-term global goal and pulls together the other elements of the agreed outcome, in the following form:

The Conference of the Parties,

Seeking to further implement the Convention, in light of evolving science and mindful of evolving economic development and emissions trends,

Recognizing, in the light of Article 2 (objective) of the Convention, the importance of identifying one or more reference points in the mid-century timeframe that can guide the efforts of the Parties and the international community and against which aggregate global efforts can be continually assessed,

Considering, in that regard, that [ ] is/are desirable global indicator(s),

Having a shared vision of [summary that ties together the elements of the agreement],

Hereby adopts [an implementing agreement].]

Annex II

**Enhanced action on adaptation and its means of implementation**

This text reflects progress in the consolidation efforts undertaken by the facilitators of the informal group on adaptation on paragraphs 18–54 (pages 23–67) of the revised negotiating text (FCCC/AWGLCA/2009/INF.1) arising from the deliberations at the informal meeting of the AWG-LCA held in Bonn, Germany, in August 2009.

The consolidation of the adaptation chapter has been undertaken in line with the approach agreed by the informal group on adaptation at the informal meeting.

Separate numbering, in the form of PP.1, PP.2, etc., has been allocated to the preambular paragraphs in the adaptation chapter.

The numbering of the operative paragraphs starts from 1, for ease of reading and for easier integration into the larger text at a later stage. The change in numbering is tracked in the explanatory tables contained in annex II to document FCCC/AWGLCA/2009/INF.2/Add.1.

Minor editorial changes have been made within the text, where necessary, for grammatical consistency and accuracy. These do not, however, change the substantive meaning of any part of the text.

There are two types of explanatory table:

- The first, contained in document FCCC/AWGLCA/2009/INF.2/Add.1, tabulates the paragraph numbers in this consolidated text, shows from which paragraphs in document FCCC/AWGLCA/2009/INF.1 they originate, and explains the rationale and consolidation processes behind the new paragraphs;
- The second type of table, available on the UNFCCC website at <<http://unfccc.int/4381.php>>, maps the paragraph numbers from document FCCC/AWGLCA/2009/INF.1 and shows where the text in those paragraphs can now be found in the consolidated text.

Structural proposals:

- 1) *Revise the structure of the chapter to reflect all aspects of adaptation action, support and institutions in an integrative manner.*
- 2) *Organize provisions according to paragraph 1 (c) (i–v) of the Bali Action Plan.*
- 3) *Organize provisions according to, and referring back to, relevant Articles of the Convention.*
- 4) *Move overarching objectives and principles to chapter I on a shared vision.*
- 5) *Distinguish common responsibilities in adaptation of all Parties from differentiated responsibilities taking account of respective capabilities and according to national circumstances.*
- 6) *Consolidate all provisions related to support for adaptation into chapter II, section B, on the implementation of adaptation action.*
- 7) *Move aspects related to adaptation finance to chapter IV, section A, on finance.*
- 8) *Move chapter II, section D, which relates to risk reduction, management and sharing, to chapter II, section B, on the implementation of adaptation action.*
- 9) *Move aspects related to institutional arrangements to chapter II, section E, on institutional arrangements.*
- 10) *Structure the adaptation chapter into six sections as follows:*
  - *A section on objectives;*
  - *A section on the role of the UNFCCC;*
  - *A section on guiding principles;*
  - *A section on implementation of adaptation actions;*
  - *A section on institutional arrangements;*
  - *A section on monitoring and review of adaptation action and support.*
- 11) *Move the bulk of the current section D, which relates to risk reduction, management and sharing, into the section on the implementation of adaptation actions.*
- 12) *Do not include the current section C on means of implementation as a section within the adaptation chapter. This section should be considered under the financing, technology and capacity-building chapter.*
- 13) *Include a section on ‘Research and Systematic Observation’.*
- 14) *Move aspects of micro-insurance and risk pooling, currently included in chapter II, section B, on the implementation of adaptation action, to chapter II, section D, which relates to risk reduction, management and sharing.*

[The Parties,

PP.1 Being Parties to the United Nations Framework Convention on Climate Change, hereinafter referred to as “the Convention”,

PP.2 In further pursuit of the ultimate objective of the Convention as stated in its Article 2,

PP.3 Recalling [the provisions of the Convention] [Article 4.1 of the Convention, which states that all countries have a responsibility to cooperate in preparing for adaptation to the impacts of climate change],

PP.4 Being guided by Articles 3.2, 3.3, 4.3 and 4.4,

PP.5 Recalling the Bali Action Plan adopted as decision 1/CP.13 by the Conference of Parties (COP) to the Convention at its thirteenth session,

PP.6 Recognizing the responsibilities of Parties under Principle 21 of the Stockholm declaration, which stipulates that activities within their jurisdiction or control of States do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction,

PP.7 Recognizing existing commitments and agreements concerning development responsibilities, including the Monterrey Consensus on financing for development and the Paris Declaration on Aid Effectiveness,

PP.8 Being further guided by the Barbados Programme of Action and the Mauritius Strategy for the Further Implementation of the Programme of Action for the Sustainable Development of Small Island Developing States,

PP.9 Recognizing that climate change poses a serious threat to social and economic development of all Parties,

PP.10 Acknowledging the need to accelerate action to address the adverse effects of climate change,

PP.11 Further acknowledging the findings of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change that warming of the climate system is unequivocal, and that delay in reducing emissions significantly constrains opportunities to achieve low stabilization levels and increase the rise of more severe climate change impacts,

PP.12 [Emphasizing][Recognizing] the urgency [and the immediacy of the climate change problem][to address climate change as indicated in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change],

PP.13 Noting that adaptation and mitigation efforts should be given equal consideration;

PP.14 Recognizing that deep cuts in global emissions will be required to achieve the ultimate objective of the Convention,

PP.15 Taking into account that although meeting adaptation needs is already an urgent necessity, it is clear that early and ambitious emission reduction by developed country Parties will decrease the effort and funding needed for adaptation. Poor mitigation commitments and actions will impose a higher demand on adaptation measures and will require additional funding,

PP.16 Recognizing their responsibilities to urgently mitigate emissions that are, by causing climate change, damaging, and will continue to damage, areas beyond their national jurisdiction,

PP.17 Recognizing that adaptation occurs at local, regional and national levels, and is an inherent part of development planning and implementation,

PP.18 Noting that there are major differences among the different regions of the world, and the States which they comprise, in terms of environmental, economic and social conditions and the level of development which will lead to different judgments on priorities in addressing problems related to adaptation to climate change,

PP.19 [Recognizing, and giving full consideration to, adaptation as an additional burden to developing countries, and which must address the specific needs and special circumstances of all developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change,]

PP.20 [Recognizing][Noting] that [the LDCs and SIDS][low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems] are particularly [the most] vulnerable to the adverse impacts of climate change [and that these groups of countries will suffer disproportionately],

PP.21 [Recognizing that][Bearing in mind] [the specific needs and special circumstances] [special adaptation needs] of [the economically vulnerable] developing [countries][country Parties] [that are particularly dependent on fossil fuel production, use, and exportation, and][, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing countries Parties,] that would have to bear a disproportionate or abnormal burden [under the Convention], should be given full consideration,

PP.22 Recognizing the value of leveraging the work of existing organizations and institutions already involved in addressing climate-related risks and opportunities.

#### **A. Objectives, scope and guiding principles**

1. Adaptation is a challenge shared by all Parties.
2. Adaptation to the adverse effects of climate change is an urgent global problem that requires long-term and coordinated actions, based on solidarity, and a shared responsibility for facilitating and mobilizing support and action on adaptation.
3. [International cooperation on adaptation [is urgent and] shall be accorded the same level of priority and emphasis as that given to mitigation.]
4. The Parties, in recognizing the need for greater efforts to adapt to climate change, agree to further enhance the implementation of their common obligations under Article 4.1(e) of the Convention.
5. For the purposes of this agreement, the definitions contained in Article 1 of the Convention shall apply. In addition:
  - (a) “Conference of the Parties” means the Conference of the Parties to the Convention;
  - (b) “Convention” means the United Nations Framework Convention on Climate Change, adopted in New York on 9 May 1992;
  - (c) “Particularly vulnerable developing countries” are developing country Parties that are particularly vulnerable to the adverse effects of climate change, especially least developed countries and small island developing States and countries in Africa affected by drought, desertification and floods;

(d) “Party” means, unless the context indicates otherwise, a Party to this agreement.

6. Articulation of vulnerability should be consistent with the Bali Action Plan, and be consistent throughout the text.

7.

#### Option 1

[Adaptation should encompass only action to respond to the adverse effects of climate change [in all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems that are particularly vulnerable to the adverse effects of climate change] [Priority should be given to vulnerable groups and vulnerable sectors based on national circumstances in developing countries as informed by the best available science, and based on scientific and traditional knowledge, as appropriate, and environmentally sound, economically efficient, and socially acceptable development, and that promotes on-the-ground results in line with environmentally, economically and socially sound development].]

#### Option 2

[[Adaptation also encompasses [adaptation] [actions to respond to the adverse effects of climate change as well as] to the impact of the implementation of response measures.] [Adaptation actions should encompass action to respond to the adverse impacts of climate change, reducing vulnerability to climate variability and climate change, and mitigating the adverse impacts of response measures.] [Adaptation should encompass the adverse impacts of climate change on vulnerable developing countries and the LDCs (Article 4.8 and 4.9) as well as the impact of response measures (Article 4.10).]]

8. Adaptation to the adverse effects of climate change is aimed at reducing the vulnerability and increasing the resilience of ecological, social and economic systems to present and future climatic changes, in order to minimize the threats to life and livelihoods, assets, amenities, ecosystems and sustainable development.

9. Parties, working collectively and taking into account their common but differentiated responsibilities and respective capabilities, should:

- (a) Exchange information and knowledge at the local, regional, and international levels in a manner that allows for sharing of best practices and lessons learned to facilitate scaled up action on adaptation;
- (b) Enhance data collection and availability to inform adaptation planning;
- (c) Build capacity for enabling environments in a manner that leads to progress on adaptation;
- (d) Enhance coherence and facilitate linkages with other international, regional and national organizations, programmes, and bodies that are implementing adaptation-related actions.

10. [International [adaptation action and] cooperation [shall] [should] [galvanize greater attention and efforts towards adaptation at all levels to:] [be enhanced with a view to:]

- (a) [Prevent, reduce or minimize the adverse effects of climate change, particularly on the most vulnerable developing countries, namely: the LDCs, the SIDS and the African countries affected by drought, as well as the poorest and most vulnerable populations in other developing countries such as those in central America] [Minimize the adverse



impacts of climate change, to assist in building climate resilient communities and to enhance sustainable development];

- (b) Facilitating, [supporting and implementing] [[and supporting] the implementation of] [urgent and immediate, medium- and long-term] [actions on] adaptation [action] [to the adverse effects of climate change in an effective, efficient, equitable, transparent, coherent and timely manner] [by] [of] [all] [developing countries] Parties at local, [sub-national,] [national,] regional and global levels[, to respond effectively, coherently and in a timely manner to current and future impacts of climate change, and impacts of response measures] [particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems that are particularly vulnerable to the adverse effects of climate change, through financial, technological and capacity building support by developed countries considering their historical responsibility];
- (c) [As elaborated in the Bali Action Plan, paragraph 1(c), mobilize action on adaptation at all levels that responds to the impacts that are already occurring and is sufficient to address the impacts that are expected to occur in the future, taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods;]

11. [Such cooperation [shall] [should] [must] [be enabled] [be supported] [assisted, where appropriate] [by] [from] [means of implementation] [developed country Parties] [with a view to facilitating, supporting and implementing] [the asymmetries and] the [urgent and immediate], medium and long-term adaptation action [specific] needs [and special circumstances] [so as to respond effectively, coherently and in a timely manner to current and future impacts of climate change] [take into account] [be prioritized] [prioritize] [for] [all] [developing] [the least developed] [countries] [especially those] [in Africa and other developing countries] [that are [particularly] vulnerable to the adverse effects of climate change] [that are least able to adapt] [including by taking their urgent and immediate needs into account] [as stated in preambular paragraph 19 and Article 3.2 of the Convention] [and countries whose economies are highly dependent on income generated from production, processing and export, and/or consumption of fossil fuels and associated energy-intensive products (Article 4.8 (h)) [and be consistent with national priorities and development objectives at the national level and coordinated at the regional level, where appropriate, especially between countries with shared natural resources with a view to enhancing coordinated and collective adaptation actions].]

12. [[The COP shall [adopt] [establish]]] a comprehensive, [strategic] [robust] [flexible] [cooperative] [structured] [country-driven] and action-oriented [adaptation] [framework [of implementation]] [programme] [implementation framework/strategy/programme] [mechanism] [for] [adaptation and its means of implementation] [action on adaptation to the adverse effects of climate change] [on the implementation of adaptation action] [which includes an overarching policy strategy designed to stimulate actions to support domestic adaptation] [shall be adopted] [is [hereby] established] [under the guidance of the Convention] [based on the principles and obligations under the Convention] [and based on the principles and obligations acquired under it due to their historical GHG emissions] [whose objectives [are] [is]:] to:

- (a) [Catalyse greater action on adaptation at all levels] [Galvanize national and international support for adaptation priorities in a range of sectors] [Enhance long-term cooperative action on adaptation in a manner that reduces the adverse effects of climate change and builds resilience to its impacts];

- (b) [Enable, support and implement] [guide] [enable] [all Parties] [adaptation processes] [adaptation action, [and] [in order]] to reduce vulnerability [and build resilience [for all populations]] to the adverse impacts of climate change [and to recognize and honour the adaptation debt of developed countries] [by all Parties] [in all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems that are particularly vulnerable to the adverse effects of climate change];
- (c) [[Provide a comprehensive and structured approach to] Enable, support, facilitate and implement [urgent and immediate, medium- and long-term] adaptation actions, [by ensuring] [including through the provision of] the predictable, [stable,] adequate and timely flow of new and additional financial resources and the [development, deployment, diffusion, and] transfer of technology to [support] [enable urgent and immediate] national, [subnational,] regional, and subregional adaptation projects and programmes [to address the adverse effects of climate change] in all developing countries, [particularly LDCs and SIDS] [in accordance with the preamble of the Convention (preambular paragraphs 19 and 20) and its Article 4.4, 4.8 and 4.9);]
- (d) [Facilitate and mobilize support and actions on adaptation, to guide the Parties and to provide a basis for their activities to adapt to the adverse impacts of climate change. Parties are encouraged to take the framework into account in their cooperation with and support to relevant intergovernmental, regional and non governmental organisations as well as the private sector. The framework for action on adaptation should be guided and informed by Convention Articles 4.1 (b), (e) and (f), and will facilitate the implementation of adaptation action.]
- (e) Help Parties build a robust approach in their respective adaptation efforts;
- (f) Support and enhance the implementation of national adaptation plans;
- (g) [Promote] [enhance] climate-resilient development, [including enhancing resilience of most vulnerable communities, particularly in most vulnerable countries through the implementation of concrete, integrated and practical adaptation programmes] [in a manner that is practical, informed by the best science, environmentally sound, and economically efficient, and that promotes on-the-ground results;]
- (h) Encourage the development and implementation of modalities of inter-State cooperation to respond to the needs of affected populations who either cross on international frontiers as a result of or find themselves abroad and are unable to return owing to the adverse effects of climate change.]

13. [[Priority should be given to] [The [implementation of the] adaptation [framework] [programme] [strategy] [shall] [should] [apply for] [prioritize] [give priority to] [address the concerns of] [address the needs to implement adaptation actions in] [build the resilience of] [take into account]] [the urgent and immediate] [adaptation] [needs of] [the] [those] [most vulnerable to [the adverse effects of] climate change [impacts]] [that are least able to adapt] [be consistent with the specific needs and concerns of the developing country Parties arising from the adverse effects of climate change arising out of]

- (a) [The] [All] [Particularly vulnerable] [Poor] [developing] [countries] [country Parties] [that are particularly vulnerable to the adverse effects of climate change] [as defined in preambular paragraph 19 and the BAP and taking into account Article 3.2 of the Convention] [especially those identified as the most vulnerable, as is stated in the

Convention, in paragraphs 19 and 20 of the preamble, as well as in Article 4.4, 4.8 and 4.9] [especially] [particularly] [including]:

- (i) [[The LDCs and SIDS] [and [further taking into account the needs of] countries in Africa affected by drought, desertification and floods];]
- (ii) [Low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas [forested areas and areas liable to forest decay] or areas liable to floods, drought and desertification, [archipelagic countries,] and developing countries with fragile [ecosystems, including] mountainous [and highland] ecosystems [, estuaries, coastal wetlands, mangroves, coral reefs, sea-grass beds, and sand dunes with particular attention to sedimentations as well] [that are particularly vulnerable to the adverse effects of climate change, inter alia] [and landlocked [and transit] countries;] [Countries with unique biodiversity, [tropical] and mountainous glaciers and fragile ecosystems]; [Countries with economies that are highly dependent on income generated from the production, processing and export, and/or consumption of fossil -intensive products [and/or the use of fossil fuels for which such Parties have serious difficulties in switching to alternatives]] [Countries with areas prone to natural disasters] [Countries with areas of high urban atmospheric pollution];]
- (b) [[Particularly vulnerable populations, groups and communities] [All vulnerable groups whose adaptive capacity is low] [Groups requiring special protection] [The most vulnerable communities and groups] [especially] [such as] women [and] children [the elderly and indigenous peoples] [, and local communities and rural populations] [including through promoting a gender perspective and a community-based approach to adaptation] [in particular gender and youth concerns, recognizing that women and children are particularly affected by the impacts of climate change];]
- (c) [Particularly vulnerable ecosystems and species, including through promoting [an ecosystem [based] approach to adaptation] [or] sustainable ecosystem management, conservation and restoration activities, where appropriate, to support adaptation.]]

14. [[The adaptation framework shall be catalytic and established based on following assumptions:] [The following principles should guide the implementation of adaptation action:] [The implementation of the adaptation [framework][programme] [shall][should] be undertaken in the context of the following:] [Enhanced action on adaptation now, up to and beyond 2012 should:] [Adaptation planning and implementation by all Parties shall be [guided by principles of]:] [In their actions to achieve the objective of the adaptation framework, Parties should be guided, inter alia, by the following considerations:] [In furthering the implementation of the adaptation framework, Parties should be guided, inter alia, by the following, in the context of national adaptation planning processes and activities:]

- (a) [Adaptation efforts should] [be country-driven] [where national governments identify and communicate needs, priorities, and responses that are aligned with national priorities and that will enhance their capacities to adapt] [and context specific, responding to local needs, and ensuring that decisions are taken in line with the principle of subsidiarity];
- (b) [Adaptation to climate change impacts should be addressed at the local, subnational, national and regional levels, as appropriate] [Ensure that adaptation action is implemented and coordinated at the most appropriate level, including at local, sub-national, national and regional levels, recognizing the important role of national governments] [[Subsidiarity, with adaptation] respond[ing] to local needs [and decisions being taken at [all required levels, including] the [lowest] [possible] appropriate level]] [taking into account the country-driven approach, especially the indigenous peoples' and

- the local communities' views and the most vulnerable groups, such as indigenous peoples, the artisanal fishermen, women, children, and elderly, among others];
- (c) [Be [undertaken within a nationally coordinated approach] [consistent with] [integrated] [inserted] [into] local, [subnational], national [and regional] [development objectives], [programmes] [plans] [and policies] [and coordinated with regional programmes without compromising the countries' sovereignty];]
  - (d) [Be consistent with priorities and development objectives at the national level and coordinated at the regional level, where appropriate, especially between countries with shared natural resources aimed at enhancing collective adaptation actions] [Support the establishment of flexible long-term processes and mechanisms for adaptation in recognition of the long-term nature of climate change impacts, respective adaptation and climate-resilient development. Adaptation should be consistent with local, subnational, national and regional development objectives, programmes and plans, and should take into account ecosystem feedbacks to promote poverty reduction and long-term resilience];
  - (e) [[Integration of adaptation into existing and future planning and decision making structures, tools and budgets] [Consideration of adaptation during national and sectoral planning, through an integrated and programmatic approach] [Encourage the integration of adaptation into development plans, programmes, and priorities] [Facilitate and promote an integrated cross-sectoral [best practice] approach] [Promote cross sectoral priorities especially integrated land and water resources management] [Adaptation planning should integrate land and water resources management at the ecosystem, watershed, or other appropriate scale];]
  - (f) [Be undertaken in a holistic, programmatic [and integrative] manner [, avoiding [stand-alone] [fragmentation of] adaptation action and support thereof];]
  - (g) Ensure that adaptation actions deliver no-regret and multiple-benefit measures and avoid mal-adaptation and conflict;
  - (h) [Promoting [climate-resilient] [sustainable] development [in a manner that is practical, informed by the best available science and traditional knowledge as appropriate, environmentally sound, and [economically efficient] socially acceptable, and that promotes on-the-ground results in line with environmentally, economically and socially sound development]] [Risk reduction should be pursued to build resilience to climate change impacts];
  - (i) Protect and sustainably manage the natural resource base, and recognize that ecosystems and the goods and services they provide (such as water, food, soil protection and carbon capture etc.) underpin resilience and are fundamental to support human adaptation and sustainable development;
  - (j) [Be supportive of national institutional arrangements] [Strong enabling environments include appropriate policy, legal and regulatory frameworks, and well-functioning markets that provide a foundation for increased flows of investment];
  - (k) Operationalize adaptation through existing and proven institutions and process including ecosystem-based management and integrated coastal and ocean management and processes at local, national and regional scales;
  - (l) [Be flexible, [bottom-up], [results-based] and country-driven, involving all relevant stakeholders, [including women], with a view to enhancing [ownership] [joint robust

governance] [at local, [subnational], national and regional levels] [of the process of building resilience] [of the implementation of adaptation actions [, including ownership of the means of implementation provided]]];

- (m) [Plan and implement adaptation actions in a transparent and well documented way which is open to public scrutiny and discourse. Ensure the representation of key stakeholders, especially representatives of vulnerable communities, marginalized groups, women, and indigenous peoples at every stage of the process as appropriate – including in the governance and disbursement of adaptation finance, planning, implementation, monitoring and reporting] [Encourage the engagement of a wide range of stakeholders, including the private sector and civil society, in supporting and implementing adaptation action in developing country Parties] [Inclusive dialogue with all relevant stakeholders to be promoted in the identification of priorities] [Create arenas for sharing information and good practices, and forums where different public and private stakeholders can discuss concrete challenges];
- (n) [[Adaptation should be based on a solid foundation of] [Be guided and informed by] [[sound] scientific and technological knowledge][, including] [emerging] scientific findings, by [continuous learning and] [[evidence-based vulnerability] assessment processes] [[, and by] [including] traditional knowledge] [Be informed by the best available scientific research, observation and assessment on climate change, impacts and vulnerabilities, and adaptation, be environmentally sound, economically efficient, effective and should promote on-the-ground results] [Reflect indigenous knowledge and practice] [Enhance, support and promote the local traditional adaptation methods which have been experienced historically and successfully];]
- (o) [[Adopt a learning-by-doing approach] [on adaptation planning and implementation, recognizing the urgency to adapt in the absence of complete information and the need to develop and implement flexible plans and programmes that can be updated on the basis of new information and learning]] [Take into account the learning-by-doing approach and replicate it] [Support documentation and the scaling up of best practices of implementation in community and national adaptation projects];
- (p) [[Be supported by [coherent international support] [improved access to] [new], predictable, sustainable, [timely], adequate [sufficient] and stable financial resources [and technical support]][provided by developed country/Annex II Parties] [from developed countries and] [additional to [resources provided by developed country Parties to meet their] official development assistance (ODA) targets] through a coherent institutional mechanism established under the Convention to channel financial and technical resources;] [Financial support [and technology support] [as commitments of] [provided by] developed country Parties [under the Convention] to enhance adaptation actions in developing countries shall be predictable, adequate, new and additional to ODA in a timely manner] [Facilitate direct access to finance];]
- (q) [Adhere to] the precautionary principle [, agreed upon in Principle 15 of the Rio Declaration and Article 3.3 of Convention, in adaptation planning, decision-making and implementation, with regard to the scale and nature of adaptation actions and to prevent maladaptation. Any lack of full scientific certainty should not be used as a reason to postpone or scale down action on adaptation];
- (r) [[Be based on] [The international application of] [the polluter pays principle] [considering historical emissions];]

- (s) [Be equitable, effective, efficient and transparent] [Accountability, effectiveness, efficiency and transparency should guide all adaptation actions;]
- (t) [Be [consistent with [the Articles] [the provisions]] [[strictly] guided by the principles [and commitments]] of the Convention;]
- (u) Promote coherence in the way that adaptation is addressed under the Convention;
- (v) [[[Be legally binding, and] [Include] [legally-binding] provisions for ensuring the compliance of Annex II Parties with their financial commitments to support enhanced action on adaptation in developing countries] [Provisions for ensuring the compliance of developed country Parties with their financial and technology transfer commitments shall be legally binding];]
- (w) Build upon [existing processes and mechanisms] [experiences and lessons learned from past and ongoing adaptation actions], including [national, regional and local policies, measures and strategies,] the Nairobi work programme, NAPAs, Technology Needs Assessments (TNAs), the financial needs assessments under the NEEDS project conducted by the secretariat, for those developing countries that have undertaken, or will undertake these actions [and traditional practices];
- (x) [Enhance bilateral and regional cooperation in accordance with existing legal frameworks, where appropriate, especially between countries with shared or trans-boundary resources] [Enable regional assessments of vulnerability and of impacts of adaptation actions and measures between countries with shared natural resources];
- (y) [[[Be consistent with the principles under] [Take into account, where possible principles of other relevant Conventions] [Promote synergies with other relevant international agreements] [Facilitate linkages with] [such as] [similar activities being undertaken, if any, in pursuance of] the Convention on Biological Diversity, the United Nations Convention to Combat Desertification, [and] [relevant Declarations including] the United Nations Declaration on the Rights of Indigenous Peoples and the Convention on the Elimination of all forms of Discrimination Against Women [among others]] [Recognise the need to respect indigenous rights and be consistent with relevant international instruments, obligations and laws];]
- (z) The respect for, protection and promotion of the fundamental human rights and basic rights as outlined in the Universal Declaration of Human Rights, the International Covenant on Economic, Social and Cultural Rights, International Covenant on Cultural and Political Rights and other relevant conventions and treaties.]

15. [Taking into account the urgent and immediate needs of developing countries that are particularly vulnerable to the adverse effects of climate change, especially the LDCs and SIDS, and further taking into account the needs of countries in Africa affected by drought, desertification and floods,] It (the framework/strategy/programme) [shall] [should] [encompass provisions for:] [consist of:] [cover areas for enhanced action, including, inter alia:] [provide support and facilitate urgent and immediate adaptation action that reduces vulnerability and builds resilience of developing countries to impacts that are already occurring, including impacts of droughts and increasing numbers of extreme weather events, and impacts that are expected to occur in the future by:] [develop and implement a structured but flexible country-driven approach to adaptation that provides for:]

- (a) [Integrating adaptation into development and sectoral policies and practices, to ensure their effectiveness and sustainability;]

- (b) [National-level adaptation planning and implementation mechanisms, establishing and building on existing processes and methodologies where available and appropriate, for example national reports including national communications or NAPAs, as appropriate;]
- (c) [Implementation of] [Implementing] [urgent and immediate [, medium- and long-term]] adaptation action [at national, regional and global levels] [in all developing countr[y][ies] [Parties], particularly [particularly LDCs and SIDS, supported by developed country Parties] [low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems that are particularly vulnerable to the adverse effects of climate change]], including:
  - (i) [Establishing and strengthening] Enabling [activities][environments] [(policy, legislative and institutional)] [to] [that] [directly] support [enable, enhance and incentivize] [implementation of] adaptation [planning] [projects and programmes] [action], including [the insertion of climate change considerations into national development plans, and, but not limited to,] the preparation of [local,] national, [and regional] adaptation plans [and projects] (as referred to in paragraph 17 below) [to promote robust, resilient economic growth to benefit societies at all levels of development];
  - (ii) [Development and implementation of short, medium and long-term National Adaptation Programmes;]
  - (iii) [Adaptation actions, [including [but not limited to, as outlined in decisions 1/CP.10 and 5/CP.7,]] [economic diversification among others especially those identified in the national adaptation plans (refer to decisions 1/CP.10 and 5/CP.7)] [[those] identified in the national adaptation plans] [and in national, regional and local adaptation plans and projects] [national communications, NAPAs, technology needs assessments and other relevant national strategies] [that incorporate ecosystem strategies where appropriate];]
  - (iv) [Priority actions under adaptation targeting the needs of the developing country Parties that are particularly vulnerable to the adverse effects of climate change, especially least developed countries and small island developing States and countries in Africa affected by drought, desertification and floods;]
  - (v) Risk reduction and management;
- (d) [[Providing access to] [Mobilizing] Means of implementation, [to be provided to developing countries by developed countries] including [support, in terms of] finance, technology and capacity-building [for adaptation] [for implementing urgent and immediate adaptation action, at regional and country levels];]
- (e) [New, additional and predictable financial resources separate and apart from ODA that are supported by appropriate institutional mechanisms;] [A dedicated funding mechanism for adaptation;]
- (f) [[Support for] [Supporting] the implementation of [NAPAs] [immediate priorities and needs as identified in NAPAs and other relevant documents];]
- (g) [Enhanced capacity at all levels in developing country Parties that are particularly vulnerable to the adverse effects of climate change, especially least developed countries and small island developing States and countries in Africa affected by drought, desertification and floods;]

- (h) [Knowledge sharing, and transfer of adaptation technologies;] [Improving the knowledge and information bases including through research and systematic observation;]
- (i) [Risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance through a mechanism to address loss and damage from climate change impacts;] [Risk reduction, management, [prevention] and sharing, including insurance [and addressing loss and damages] that do not simply distribute the risk among the already vulnerable;]
- (j) [Coordination and integration with risk assessment and management, recognizing the Hyogo Framework for Action as the main vehicle for disaster risk reduction;] [Strengthening synergies and coherence with other adaptation related efforts, such as the Hyogo Framework for Action, for example with measures to prevent, reduce, manage and share risk, including early warning systems, spatial planning and insurance-related activities;]
- (k) [Institutional arrangements [on adaptation under the Convention, which shall include a facilitative mechanism, with an expert panel, a permanent programme on adaptation, as well as a financial mechanism] [under the Convention process that co-ordinate adaptation efforts at the international and regional levels to support country-driven priorities];]
- (l) [[Promoting coherence and] facilitating linkages with other international, regional and national programmes, bodies and stakeholders that are implementing adaptation and related activities [, including the Nairobi Work Programme]] [Facilitate linkages with local, subnational, national and regional development objectives where possible;]
- (m) [Monitoring and reviewing of [[effectiveness of] adaptation [action] [and support]] [the financial support to adaptation implementation such as transfer of financial resources for technology transfer, capacity-building and systematic research and observation];]
- (n) Reducing the impact of response measures on developing countries through, inter alia, economic diversification;
- (o) Reducing vulnerability at local level.

#### **B. Implementation [of adaptation action]**

*[Enabling [activities] [environments]] [International cooperation and support] to support adaptation action*

16. [With a view to promoting adaptation planning] [all] Parties should:
- (a) Implement planning that is multi-sectoral, includes prioritization of adaptation actions, gives priority to the most vulnerable, and makes use of the best available scientific information and analytical tools;
  - (b) Promote climate-resilient development in a manner that is practical, informed by the best science, environmentally sound, and economically efficient, and that promotes on-the-ground results;
  - (c) Identify, on a continuous basis, their country-specific adaptation needs, options and priorities, taking into account their existing capacities and past and current adaptation activities;



- (d) [Prioritize the needs and specific circumstances of the poorest and most vulnerable people and indigenous groups in planning and development processes at the local, sectoral and national levels.]

17. [[All] [Parties] [All developing country Parties] [, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems]] [Particularly vulnerable developing country Parties] [LDCs and SIDS] [with financial support from the Convention Adaptation Fund, technical support and capacity-building] [shall] [should] [may] [on voluntary bases] [formulate] [develop] [[periodically] update] [review] [and report on] [and make available to the COP] [their] [national [and/or thematic areas,] adaptation plans [and their implementation]] [national adaptation planning] [NAPAs] [national action programmes on adaptation] [within [X] years], [through] [inter alia] [as a means of] assessing [current and potential impacts of climate change] [and developing strategies to reduce these impacts through the implementation of adaptation action], identifying, costing and prioritizing their urgent and immediate, and medium and long-term, adaptation [actions and] needs, including needs related to risk management, reduction and [sharing], [that are consistent with] [on the basis of] national [and sectoral] priorities [and strategies]. [National adaptation plans may be developed and implemented at different time scales depending upon national circumstances.]

18. [Developing countries that are particularly vulnerable to the adverse effects of climate change, especially the LDCs and SIDS, and further taking into account the needs of countries in Africa affected by drought, desertification and floods, shall be provided with financial and technical assistance to develop and implement national adaptation plans, and to support the implementation of adaptation actions as a means of building resilience to the impacts of climate change.] [Adequate finance must be provided for the implementation of NAPAs. In addition, finance must be provided to all developing country Parties to enable the formulation of their national adaptation plans.] [Parties should commit to promoting adaptation to climate change by cooperating to build capacities and mobilize resources for the development and implementation of such programmes, in particular for the LDCs.]

19. [[These plans] [National adaptation programmes and activities] [shall] [should] [could] [be a component of low-emission development strategies and]:

- (a) Be consistent with the particulars provided under the international framework of adaptation;
- (b) Be developed through broad and wide consultations of stakeholders, taking into account gender consideration and the most vulnerable groups and be country driven and approved by the highest political levels within the country and communicated to the COP;
- (c) [[Catalyse] [Support] actions [in and across different sectors], promoting efficient [and effective] use of the financial resources for adaptation provided by developed country Parties under the Convention;]
- (d) Indicate areas of immediate action and support in terms of means of implementation;
- (e) [Emphasize [programmatic approaches], while also recognizing a place for adaptation projects [under certain circumstances];]
- (f) [Inform domestic action and the [provision] [allocation] of increased international financial support, possibly forming a component of a country's sustainable development plan;]
- (g) [Be used to report on the effectiveness of adaptation actions in meeting stated objectives;]

- (h) [[Consider the synergy between and the multiple benefits of adaptation and mitigation measures, including those within which options concerning reducing emissions from deforestation and forest degradation in developing countries (REDD) are particularly relevant;] [Indicate, where possible, potential synergies between adaptation and mitigation measures, and indicate if the adaptation actions may have positive or negative consequences on mitigation;]]
- (i) [Take into account [the dynamics of natural systems] [natural systems and their dynamics] [the composition, resilience and productivity of natural and managed ecosystems, and the support they provide to adaptation];]
- (j) [Include] impact assessment of actions undertaken in the context of shared and trans-boundary resources;
- (k) Take into account relevant social and economic conditions, which should be consistently defined and include gender considerations in order to enhance women's capacity to act and to contribute to adaptation actions effectively.
- (l) Integrate a gender perspective and a community-based and participatory approach to adaptation;
- (m) Take into account land degradation.]

20. [National adaptation plans [should] [could] include [at least][, inter alia]:

- (a) Vulnerability assessments;
- (b) Prioritization of actions;
- (c) [Financial needs assessments;]
- (d) Capacity-building [and response] strategies;
- (e) Means for integrating adaptation actions into [thematic areas] [sectoral] and national planning;
- (f) Identification of specific projects and programmes;
- (g) Identification of means to incentivize the implementation of adaptation actions;
- (h) [Ways to enable climate-resilient development and reduce vulnerability;]
- (i) Disaster risk [[reduction] and] management strategies;
- (j) [Means to diversify the economy as an adaptation strategy].]

21. [National adaptation planning procedures should build on existing processes and methodologies where available and appropriate, such as national communications, NAPAs, and technology needs assessments.]

22. [National adaptation plans [are to be] [should be] [reviewed and] updated [every [three to] four years] [with financial support from the Convention Adaptation Fund]. [Implementation of] national [adaptation plans [and actions]] [adaptation planning processes] [should be ongoing and iterative, and activities] [should be] [could be] [reported] [included] as part of a country's national communication.]

23. [[To promote [[the] enabling [activities] [environments] [(policy, legislative and institutional)] to support] [, enable and support the implementation of] adaptation action[s], [all Parties] [Parties] [all

developing country Parties [particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems]] [with financial support from the Convention Adaptation Fund, technical support and capacity-building] [shall][should][may]:] [To promote the enabling activities to enhance adaptation actions in all developing country Parties, the developed country Parties should]:

- (a) [[Provide support to developing country Parties for] [Promote] the integration of] [Integrate] adaptation [concerns] into [national, subnational, and sectoral] [sustainable] development [policies and strategies] [programmes and priorities] [planning processes], [disaster risk]] [[Coordinate adaptation and disaster risk reduction and integrate these into development] and poverty reduction plans, [public policies] strategies, tools and policies [at multiple levels] [at the local, national, regional and international levels] [and across sectors], [developing national adaptation plans as appropriate, and reviewing and reporting on these activities] [recognizing that climate change is an additional burden to development];]
- (b) Integrate sustainable development into economic diversification strategies;
- (c) [Provide incentives to adaptation through [inter alia] [regulatory policies], legislative changes, removal of barriers, [involving women as active participants,] and other supportive approaches] [Minimize incentives that encourage maladaptation] [Reduce perverse incentives that encourage unsustainable land uses, and reducing negative economic incentives (e.g. tax breaks) for vulnerable activities];
- (d) Build resilience to climate variability and change into economic development activities and institutions;
- (e) [[Provide technical support to developing country Parties to] Undertake [sound] [impact] vulnerability and adaptation assessments, including [costs and benefits] [those at the local, national and regional levels, employing a range of decision-making tools and methodologies] [identify major vulnerabilities to climate change];]
- (f) [[Support capacity-building efforts] [Provide financial and technical support to building capacity, including institutional capacity in developing country Parties] [Promote local and needs-oriented capacity-building activities for adaptation at all levels, including through specific targeted training and technical support] [Build capacity, including institutional capacity [, through the provision of financial [and technical support] [resources and technology development and transfer] for]:]
- (i) [Operational planning of adaptation, including for detailed project design, costing of adaptation, [implementation of adaptation actions] and increasing adaptive capacity;]
- (ii) [Systematic observation, data collection and archiving, analysis, modelling [and] dissemination and application;]
- (iii) Applying climatic information in sectoral planning as well as in cross-sectoral planning such as integrated water resources management;
- (iv) Running and interpreting complex models;
- (v) Improved emergency response capabilities, including governance structures that encourage efficient use and coordination of local, national and international resources;

- (vi) Analysing institutional vulnerabilities in developing countries in order to build national capacities in specialized areas, such as modelling, adaptation planning and implementation, and strengthen the relevant institutional capacities;]
- (g) [Support the supply and availability of adaptation technologies, climate information (including through research and systematic observation), tools, methods and models, particularly in the most vulnerable countries;]
- (h) [[Engage in] [Enhance] education and training programmes, research and public awareness-raising; [including public and stakeholders education and continued outreach];]
- (i) [Share knowledge, information [, data] and experience [including utilizing the services of relevant institutions] at [local, national,] regional and international levels, consistent with international agreements;]
- (j) Enhance or develop the needed information and knowledge base (both biophysical and socioeconomic), including improving scientific research, data systems and data collection, to support adaptation and catalyze adaptation investments. This includes enhancing observations and data, and making that data available, to inform assessment and planning for adaptation and provide inputs for approaches such as parameterized insurance;
- (k) Integrate knowledge, experiences and lessons learned from existing activities, including those carried out at the community level as well as activities from ongoing initiatives such as the Nairobi Work Programme, into adaptation planning;
- (l) Improve knowledge of the socio-economic aspects of climate change and promote the integration of socio-economic information into impact and vulnerability assessments;
- (m) Exchange experiences and opportunities relating to the development and dissemination of measures, methodologies and tools aimed at increasing economic resilience;
- (n) Exchange experiences and lessons learned in economic diversification, including ways to develop institutional capacity, and improve understanding of how economic diversification can be integrated into sustainable development plans, especially those that promote sustainable economic growth and eradication of poverty;
- (o) Elaborate best practices that can guide immediate actions with an eye to building long-term resilience to extreme events and disasters, including through implementation of the Hyogo Framework for Action;
- (p) [Encourage pilot projects [to increase and create synergy and champions] related to [microinsurance and [global] risk pooling] [improving adaptive capacity] [, [where] [as] appropriate] [within a country-driven approach to adaptation] [that do not impose additional burdens on the already vulnerable];]
- (q) [Inform and involve the most vulnerable groups in the decision-making process and management of adaptation activities;]
- (r) [Engage in [a [three-year] pilot phase of] adaptation activities implemented cooperatively, to catalyse rapid learning about adaptation good practice by supporting enhanced implementation of demonstration projects, programmes and policies in vulnerable countries, as well as regions, and communities groups, sectors and ecosystems within all developing countries;]

- (s) [[In order to bridge short-term actions to medium and longer term actions][Establish] a short-term work programme up to and beyond 2012 [shall be established by the Parties] in order to support [the preparation and implementation of NAPAs, and] the strengthening of observation systems, the creation of databases for climate data, downscaling and targeted capacity-building for long-term planning].]

*Implementation of adaptation actions*

24. [All Parties shall undertake adaptation actions to reduce vulnerability and to build their resilience to the impacts of climate change.] [Parties should commit to promote adaptation to climate change by:

- (a) Setting as their common goal sustained and effective action to address adaptation to the impacts of climate change;
- (b) Taking immediate no regrets adaptation actions, wherever possible, using existing knowledge, resources, plans and processes.]

25. [The adaptation [implementation] [framework] [programme] [shall] [should] support and enhance the implementation of national adaptation programmes, projects, actions and plans [in all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems].] [Developing country Parties shall be assisted by developed country Parties to implement adaptation activities, projects, programmes, strategies and actions identified through various national processes, including in national communications.] [LDC adaptation actions will be supported by financing, technology, and capacity-building. Issues relating to finance and technology are discussed in their respective sections elsewhere in the text.]

26. [Adaptation [action] [plan] includes:

- (a) [Specific [short-, medium- and long-term] adaptation programmes, projects, and actions for implementation [at local, subnational and national levels] [at all levels, including local, subnational and national levels] [at project and sectoral levels]; and activities identified in the national adaptation plans, and in integrated climate territorial plans [and cross-sectoral and sector-based activities], including NAPAs; and from the household up through macro-level to ensure adaptation actions respond to the needs of entire communities;]
- (b) [Programmes, projects, actions, strategies and measures to reduce, manage and share risk, including early warning systems, insurance-related activities [and activities addressing loss and damage from climate change impacts, including those arising from extreme weather events] and gradual changes;]
- (c) [Programmes, projects, actions, strategies and measures] [Administrative and legislative actions] [to build resilience] [to enhance adaptive capacity], [including through economic diversification];
- (d) Strategies and measures geared to minimize adverse social, environmental and economic impacts on developing countries identified in Article 4, paragraphs 8 and 9, of the Convention;
- (e) [R&D, deployment, diffusion and transfer of [adaptation technologies] [technologies for adaptation], including capacity-building, taking into account [sector-specific adaptation technologies, ecosystem-scale intersectoral linkages and] endogenous national or regional adaptation technologies in a voluntary manner and consistent with relevant international agreements;]

- (f) [[Means to protect] [Activities related to national and international [migration of] [displacement of] [planned relocation of] [responses to]] [climate [refugees] [migrants]] [persons] [individuals and peoples] [displaced by] [affected by] [extreme climate events] [the [adverse] impact of climate change].]]

27. [[All] [Annex I] Parties [[should promote] [the participation of] [involvement, coordination and communication across]] [are encouraged to engage] a [wide] range of [their] [stakeholders, including] [national and international organizations] [[R&D] institutions, universities, research centres] [agencies] [local communities,] the private sector and civil society, [indigenous peoples, women and children,] in supporting and implementing adaptation action [in developing country Parties] [, bearing in mind that the involvement of the private sector and other stakeholders should supplement and not substitute the role of the developed country Parties related to the provision of financial resources and transfer of technology under the Convention].]

### C. Means of implementation

28. [The adverse effects of climate change [and response measures] [, due to the historical cumulative GHG emissions of developed countries,] constitute an additional burden on [all] developing country Parties [particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems] in reducing poverty [, developing strategies to address social vulnerabilities] and attaining sustainable development and [a threat to achieving] the United Nations Millennium Development Goals.] [Economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties, as stated in Article 4.7 of the Convention.]

29. [[The adaptation [framework] [programme]] [The provision of [financial resources, including technology transfer and capacity-building shall be in accordance with Article 4.3, 4.4 and 4.5 of the Convention and] must provide] scaled-up new, additional, adequate, predictable and sustainable financial [resources], technological and capacity-building support to address all key areas of the adaptation [framework] [programme] in a manner that is holistic, and consistent with national and regional development objectives, programmes and plans.] [Therefore, the financial support additional to ODA necessary for the implementation of adaptation actions should be covered in full by the developed country Parties.] [Financial support [must therefore be additional to finance for development, i.e. ODA, and] [shall] [should] be provided [by developed country Parties] [both] on a grant basis [and as concessional loans] to [assist in meeting] [meet] the [agreed] [full costs] [and] [agreed] [full] [incremental] costs of adaptation [action] in developing countries [with special consideration given to LDCs and SIDS] [and for stand-alone adaptation programmes].] [Developed country Parties shall improve access to new, additional and predictable financial flows.] [The developed country Parties shall provide new and additional financial resources – above what is now provided for national communications – to meet the agreed full costs incurred by developing country Parties in compliance with their obligations under Article 12, paragraph 1, and Article 4, paragraph 3, of the Convention.]

30. The provision of financial and technical support by developed country Parties for adaptation programmes in developing countries is a commitment under the Convention that must be urgently fulfilled. Commitments made by Annex I Parties to support implementation of the Adaptation Framework through financial and technology transfer shall be legally binding, with provisions for a [monitoring, reporting and verification] mechanism to ensure compliance. There should be regular reporting through national communications on the implementation by developed country Parties and other developed Parties included in Annex II of their commitment under Article 4.4 of the Convention to assist vulnerable developing countries in meeting the costs of adaptation.

31. [Financial support for [sustained and ongoing] adaptation [planning and implementation] [shall] [should] [generally] be provided [to developing country Parties on the basis of entitlements to receive regular flows of periodic grant instalments] [through a programmatic approach] [and] [or] for project-based [stand-alone activities] [adaptation action] [while also allowing flexibility for countries to receive financial support for adaptation through a programmatic approach and for project-based adaptation action].] [Provision of financial support shall be country-driven and follow a programmatic approach where possible, but also allow for using a project approach, when appropriate.] Support for adaptation shall seek to strengthen the countries in their adaptation efforts by support to country-driven adaptation planning processes and implementation, emphasizing programmatic approaches, while also recognizing a place for adaptation projects under certain circumstances.

32. [In delivering means of implementation for adaptation action[s] in developing country Parties, complementarity and coherence [shall] [should] be ensured among existing international sources of support, including funds under the Convention and bilateral and multilateral funds outside the Convention.] [Coherence should be maintained in funding adaptation through the Convention, and outside the financial mechanism of the Convention, in accordance with the guidance provided by the COP.] [Funds will be under the control of the COP as the supreme authority of the Convention. Other complementary funds may be used on the understanding that they will not be the main source of funding for adaptation actions.] [These funds should be provided in accordance with the commitments of Parties under the Convention and to be delivered in accordance with the financial mechanism, as proposed by the G77-China.] [Financial resources should be provided through the enhanced financial architecture, and under the authority and guidance of, and fully accountable to, the COP.]

33. By 2020 the scale of financial flows to support adaptation in developing countries must be [at least USD 67 billion] [in the range of USD 70–140 billion] per year. [Sources of new and additional financial support for adaptation [must meet the full agreed incremental costs of adaptation and initially be within a minimum range of USD 50–86 billion per annum and regularly updated in the light of new emerging science, financial estimates and the degree of emission reductions achieved.] [will be needed to scale-up adaptation activities at the country level in developing country Parties].] Adaptation financing must be substantially scaled up and must be sufficient to:

- (a) Meet the financial requirements for adaptation programmes at national, subregional, regional and international levels;
- (b) Meet the required financial resources, technologies and capacity-building for the implementation of action on adaptation in accordance with the commitment of the developed country Parties;
- (c) Provide adequate, predictable, stable and timely financing at full-cost and grant based with direct, simplified and expeditious access;
- (d) [Cover] [support] [all] [the different] stages of adaptation [activities], [from identification of actions to implementation] [and should therefore have commensurate resources];
- (e) Provide new and additional resources, that is, additional to ODA financing;
- (f) Require no co-financing, in terms of additionality.

34. [Taking into account the provisions of paragraph 38 below, developing country Parties [– those Parties eligible to borrow from the World Bank (IBRD and/or IDA) or eligible recipients of UNDP technical assistance through its country indicative planning figure (IPF) –] [particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems]

[giving priority to the most vulnerable] [and Parties with economies in transition] [[[shall] [should] [receive access to] [be provided with] finance [on a continuous basis], technology and capacity-building [by at least 0.5 per cent of GDP of developed countries], to support adaptation action at local, subnational, national, regional and global levels, including:] [shall be supported in their adaptation actions, including adaptation planning and implementation, and support to adaptation action [shall] [should] encompass provisions for:]

[Developed country Parties [,in order to pay their adaptation debt to the developing country Parties] [shall] [should] provide [finance, technology transfer and capacity-building to] support [for] adaptation actions [in developing countries, in accordance with the provisions of the Convention.] [at local, subnational and national levels as well as for stand-alone projects/actions] Such actions may include:]

- (a) [Activities referred to in section B above and paragraph 35 below relating to the implementation of adaptation actions and enabling [activities] [environments] to support those actions;]
- (b) [Identified adaptation programmes, projects or actions, such as those arising from [national sustainable development strategies],] risk reduction strategies, [poverty reduction strategies,] national communications and NAPAs and other relevant instruments;]
- (c) Means of implementation, including finance, technology and capacity-building;
- (d) Institutional arrangements;
- (e) Monitoring and review of adaptation action and support.]

35. [A Convention Adaptation Fund shall be established based on assessed contributions from Annex I countries and other possible sources of finance. The Convention Adaptation Fund must ensure sufficient financial resources for all developing country Parties to:] [[Developed country Parties shall provide] [[Agreed] full cost and [agreed] [full] [incremental] cost coverage, in accordance with Article 4, paragraph 3, [should be provided] [, inter alia] for]:

- (a) [Promote enabling activities to support adaptation action and implementation;]
- (b) [Enhance [enabling activities such as building capacity][capacity-building] [, including data collection, development of climate scenarios, assessments of vulnerability and adaptation, including the assessment of adaptation costs and to promote education, training and public awareness related to climate change.] [, including institutional capacity, through providing financial and technical support for]:
  - (i) Operational planning of adaptation, including for detailed project design, costing of adaptation and increasing adaptive capacity;
  - (ii) Systematic observation, data collection and archiving, analysis, modelling and dissemination;]
- (c) Cover the full costs of preparing national adaptation plans, identifying priority activities/projects intended to address urgent and immediate adaptation needs, and incorporation of adaptation considerations into sectoral and national development planning;
- (d) Implement [stand-alone] [specific] adaptation actions, projects and programmes [at local, subnational and national levels, and cross-sectoral and sector-based activities], in particular the most urgent ones;



- (e) Implement [risk management and risk reduction strategies][strategies and measures to reduce, manage and share risk], including [establishment of] an early warning system, [insurance-related activities and activities addressing loss and damage from climate change impacts, including those arising from extreme weather events];
- (f) Build [climate] resilience [strategies and measures] [,including] through economic diversification;
- (g) [[Resilience-building activities with the participation of all stakeholders,] [Improvement of adaptive capacity] based on vulnerability [and disaster risk reduction] assessments, including for sustainable livelihoods, [economic diversification for a sustainable economy,] sustainable agriculture, building community capacities and infrastructures, access to technologies and innovations, etc.];
- (h) Enhance institutional capacity for preventive measures, planning and preparedness for disasters relating to climate change;
- (i) [Promote [research and development [in], [deployment,] diffusion [of and access to] [and transfer of]] adaptation technologies [, including capacity-building, taking into account sector-specific adaptation technologies, ecosystem-scale intersectoral linkages and endogenous adaptation technologies];]
- (j) Develop and enhance endogenous capacities for technologies;
- (k) Have adequacy of funds for accessing transferred technology;
- (l) [[Preparation and] [Starting full] implementation of [national adaptation [action] plans] [NAPAs [and ensure NAPAs include a focus on economic diversification]] [activities identified in NAPAs by 2012] [NAPA-like] and stand-alone adaptation projects or programmes;]
- (m) Formulating economic development strategies;
- (n) Establishment of an economic diversification forum;
- (o) Strengthening the crucial linkages between economic diversification and sustainable development, and taking action to lower the substantial barriers;
- (p) Improving environmental and energy efficiency in upstream and downstream activities relating to fossil fuels;
- (q) [Activities related to national and international migration and displacement or planned relocation of persons affected by climate change.]]

36. [Access to adaptation funds by Parties shall be inversely proportional to their contribution to greenhouse gases in the atmosphere.] [Access to funds to implement priority adaptation activities identified by Parties shall not be conditional on the completion of national adaptation plans.] Development of an adaptation strategy and programme should be enabled if one is not available at country level. Means should be provided, on a continuous basis, to enable, support and enhance national capacity to incorporate adaptation into planning and designing adaptation activities. Funding should go beyond integration of adaptation to sustainable development plans, and to include stand-alone adaptation.

37. [Proposals for funding support for adaptation in developing countries that are particularly vulnerable to the adverse effects of climate change, especially the LDCs and SIDS, and further taking into account the needs of countries in Africa affected by drought, desertification and floods, shall be:

- (a) Country-driven;
- (b) Guided by indigenous knowledge;
- (c) Funded in an expeditious manner;
- (d) Funded directly to governments and community organizations in accordance with national policies or legislation.]

38. [In providing support, priority [shall] [should] be given to:

- (a) [Those most vulnerable to the adverse effects of climate change and least able to adapt;]
- (b) [Supporting adaptation at local, subnational, national and regional levels in developing countries;]
- (c) [[All developing country Parties, in accordance with paragraph 5 above (containing new definitions to be agreed)] [[Particularly] vulnerable] developing country Parties, [as stated in Article 4, paragraph 8, of the Convention] [especially] [inter alia]:

Option 1

- (i) [Poor developing countries;]
- (ii) [LDCs and SIDS, [and [countries in] Africa and Asia affected by drought, desertification and floods and landslides];]
- (iii) [Low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, [archipelagic countries,] and developing countries with fragile mountainous ecosystems and landlocked countries;]
- (iv) [Countries with unique biodiversity, [tropical] [mountainous] glaciers and fragile ecosystems;]

Option 2

- (i) [Small island countries;
- (ii) Countries with low-lying coastal areas;
- (iii) Countries with arid and semi-arid areas, forested areas and areas liable to forest decay;
- (iv) Countries with areas prone to natural disasters;
- (v) Countries with areas liable to drought and desertification;
- (vi) Countries with areas of high urban atmospheric pollution;
- (vii) Countries with areas with fragile ecosystems, including mountainous ecosystems;
- (viii) Countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products;
- (ix) Land-locked and transit countries.]]

- (d) [Particularly vulnerable [sectors,] [ecosystems,] populations, groups and communities, especially the poor, women, children, the elderly, indigenous peoples, minorities and those suffering from disability.]

39. [In prioritizing support, the level of vulnerability shall be determined, inter alia, by national circumstances, respective financial and technical capabilities, levels of risk and impacts as well as levels of poverty and climate change [exposure] [vulnerability].]

40. [In addition to the above, priority consideration] [In relation to the above priorities, consideration] should also be given to [ecosystem-based and community-based adaptation activities, where appropriate, at local and national levels.] [sustainable ecosystem management, conservation and restoration activities, where appropriate, to support adaptation.]

41. [Providing financial support shall be additional to developed countries' ODA targets.] [Mandatory contributions from developed country Parties and other developed Parties included in Annex II should form the core revenue stream for meeting the cost of adaptation in conjunction with additional sources including share of proceeds from flexible mechanisms.] [This finance should come from the payment of the adaptation debt by developed country Parties and be based principally on public-sector funding, while other alternative sources could be considered.] [[Sources of new and additional financial support for adaptation] [Financial resources of the "Convention Adaptation Fund"] [may] [shall] include:

- (a) [Assessed contributions [of at least 0.7% of the annual GDP of developed country Parties] [from developed country Parties and other developed Parties included in Annex II to the Convention] [taking into account historical contribution to concentrations of greenhouse gases in the atmosphere];]
- (b) [Auctioning of assigned amounts and/or emission allowances [from developed country Parties];]
- (c) [Levies on CO<sub>2</sub> emissions [from Annex-I Parties [in a position to do so]]];]
- (d) [Taxes on carbon-intensive products and services from Annex I Parties];]
- (e) [[Levies on] [Shares of proceeds from measures to limit or reduce emissions from] international [aviation] and maritime transport;]
- (f) Shares of proceeds on the clean development mechanism (CDM), [extension of shares of proceeds to] joint implementation and emissions trading;
- (g) [Levies on international transactions [among Annex I Parties];]
- (h) [Fines for non-compliance [of Annex I Parties and] with commitments of Annex I Parties and Parties with commitments inscribed in Annex B to the Kyoto Protocol (Annex B Parties);]
- (i) [[Additional ODA] [ODA additional to ODA targets] provided through bilateral, regional and other multilateral channels (in accordance with Article 11.5 of the Convention).]

42. Parties should commit to:

- (a) Promoting the full range of available management tools and financing options in implementing local, national or regional adaptation actions, including innovative managerial and financial techniques;

- (b) Encouraging financial flows for adaptation to the LDCs and the poorest and most vulnerable communities within countries;
- (c) Promoting the conditions that will encourage private-sector investment to build resilience in sensitive sectors;
- (d) Promoting access to appropriate technologies, knowledge and expertise to address adaptation, in particular for the least developed countries, including the creation of enabling environments for the successful adoption of such technologies.

**D. [Risk reduction, management and sharing] [Risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance]  
[Risk reduction and management]**

43. [All Parties should commit to reducing and better managing risks associated with climate change, and undertake activities to improve risk management and risk reduction through strategies that link development, climate adaptation and disaster risk reduction.] [Risk reduction should be given priority in preparation of adaptation planning in order to minimize the adverse effect of climate change, including extreme events and climate-related disasters.]

44. [[Taking into account the intrinsic connection between adaptation policies and measures, risk [management][reduction strategies], [insurance], disaster reduction strategies, [poverty reduction strategies and national sustainable development plans], [at the national and regional levels],] the adaptation implementation [framework][programme] [shall][should]:

- (a) [Support country-driven projects and programmes [in all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems that are particularly vulnerable to the adverse effects of climate change,] aimed at assessing, managing, reducing and sharing the risks associated with climate change, [including the impacts of extreme weather events, and of gradual changes,] [as well as other short-, medium- and long-term risks] through, inter alia, the implementation of the Hyogo Framework of Action<sup>1</sup>;
- (b) [Enhance insurance, risk assessment and management [through, inter alia, the implementation of the Hyogo Framework of Action];]
- (c) [Ensure that NAPs are consistent with, or incorporate elements of, national risk management plans, disaster risk reduction;]
- (d) [Ensure that national-level processes are supported by regional and international mechanisms, as appropriate.]]

45. [During the planning and implementation of the projects and programmes mentioned in paragraph 44 above, coherence should be ensured with the implementation of other adaptation action, and with other adaptation-related efforts, [including][, in particular] under the Hyogo Framework of Action.]

46. [Activities [shall be part of the National Adaptation Plans and] should include:

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<sup>1</sup> The Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities to Disasters. Available at <<http://www.unisdr.org/eng/hfa/docs/Hyogo-framework-for-action-english.pdf>>.]

- (a) Preparing and implementing [national adaptation plans], [[national] and [local]][disaster] risk [reduction][and][strategies] [management plans];], including:
  - (i) Strengthened risk observation, risk analysis and risk information dissemination;
  - (ii) Early warning systems;
  - (iii) Disaster preparedness [and [extreme weather forecast] contingency plans];
  - (iv) Emergency response and recovery;
  - (v) Risk transfer mechanisms [, including insurance];
  - (vi) The systematic integration of risk reduction measures in national, subnational and sectoral development planning and programming.]
- (b) Identifying major vulnerabilities to climate change;
- (c) Creating legal and regulatory conditions that facilitate adaptation, including disaster resilience (for example, building codes, land-use planning, risk-sharing tools, and strengthening policy coherence among sectors);
- (d) Elaborating best practices that can guide immediate actions with an eye to building long-term resilience to extreme events and disasters, including through implementation of the Hyogo Framework for Action;
- (e) Minimizing incentives that encourage maladaptation;
- (f) Educating stakeholders at all levels about adaptation options and the benefits of reducing vulnerability to climate-related risks;
- (g) Using meteorological, Earth observations, socio-economic information, and local and indigenous knowledge to best coordinate disaster planning and response;
- (h) Establishing systems of accountability such as institutional checks and balances and open administrative systems. Establishing the rule of law through means and processes for enforcement;
- (i) Improving the environment for doing business – particularly for small and medium enterprises – by combating corruption and reducing bureaucratic barriers (i.e. red tape) to private-sector business activity;
- (j) Improving availability and application of climate and environmental information, including but not limited to remote sensing, and decision-making tools;
- (k) Clarifying and securing land tenure and planning – i.e. allocation, ownership and control over lands and resources;
- (l) Strengthening environmental and natural resources management and enforcement.]

47. [To] [support][assist] [particularly vulnerable [[regions, communities, groups, sectors, and ecosystems within] [all]] developing countries.] [developing countries that are particularly vulnerable to the adverse effects of climate change, especially the least developed countries and small island developing States, and further taking into account the needs of countries in Africa affected by drought, desertification and floods, to minimize and address loss and damage from climate change impacts.] [[a

[multi-window] mechanism]<sup>2</sup> [dedicated financing window in G77 financial mechanism] [various mechanisms]<sup>3</sup> for [adaptation,] [risk reduction] [and management] [and sharing] [exist and should be built on to:] [[[could]][must] be established] [within the adaptation framework] [to:] [and should be guided by the following principles:]

- (a) Be consistent with the country-driven approach to adaptation;
- (b) [Function at the international level;]
- (c) [Guarantee equitable access and governance, considering all relevant sectors and stakeholders;]
- (d) [Coordinate its operation with other insurance and re-insurance institutions, and United Nations organizations and other relevant international organizations associated with disaster risk management.]

48. [[This mechanism][These mechanisms] [will][could][shall] [serve as a window to provide rapid financing to cope with the aftermath of extreme climate events, including as [a][an] [insurance] compensation mechanism.] [include innovative financial instruments, for example venture capital funds and climate insurance funds, integrated into the financial mechanism, for addressing the risks associated with climate change.] [consist of the following [distinct but interlinked and interdependent] components [that provide an integrated approach to loss and damage from climate change impacts, and that are required to assist developing countries mentioned in paragraph 47 above]:

- (a) A risk [reduction/] management [and risk prevention] component [, through inter alia the implementation of relevant frameworks such as the Hyogo Framework]:
  - (i) [To develop and promote][Which shall support] [risk assessment][and risk management] [tools and strategies at all levels][in developing countries mentioned in paragraph 47 above];
  - (ii) [[Which shall promote][With a view to facilitating and supporting] the implementation of [appropriate] risk reduction and risk management measures [to minimise loss and damage].]
- (b) [An insurance component:
  - (i) To address climate-related extreme weather events, and risks to crop production, food security, water availability, disease increase and local livelihoods that encourage risk reduction;
  - (ii) Which shall facilitate the design, establishment and operation of insurance-related risk sharing and risk transfer mechanisms tailored to the needs of particularly vulnerable developing countries, especially the least developed countries and small island developing States, to address financial risk associated with increasingly frequent and severe climate-related extreme weather events, including hurricanes, tropical storms, floods and droughts, which result in loss and damage, and leverage public and private funding to enhance adaptive capacity.]

[Insurance payments for particularly vulnerable developing countries shall be facilitated through the financial mechanism.]

<sup>2</sup> Parties also referred to “multi-option”.

<sup>3</sup> Parties also referred to “systems”.

- (c) A rehabilitation [and]/ [compensation][compensatory] component [to][shall] address loss and damage resulting from the [current and] progressive negative impacts [of climate-related slow-onset events, including sea level rise, increasing sea and land temperatures, ocean acidification (e.g. land loss, coral bleaching, impacts on potable water availability, reduction in fisheries, desertification etc.)];
- (d) Innovative financial instruments, for example venture capital funds and climate insurance funds, integrated into the financial mechanism, for addressing the risks associated with climate change.]]

49. [Public-private partnerships [shall] [should] be promoted to catalyse wider engagement of stakeholders, including the private sector and civil society, in risk reduction, management and sharing, including insurance and addressing loss and damages, bearing in mind that the involvement of the private sector should supplement and not substitute commitments by developed country Parties under the Convention.]

### **E. Institutional arrangements**

50. [The [Convention] [Copenhagen Agreement][COP] [[should][shall] [guide and coordinate][promote] [[assume][play] a [catalytic][primary][coordinating] role in [guiding][mobilizing][supporting][coordinating]]][can serve as a catalyst] [for] [actions on] [[in] the implementation of] adaptation [activities][actions] [at the international level] [, including cooperative action by all Parties and by relevant international, regional and national organizations and institutions][, ensuring the provision of predictable, adequate, new and additional financial resources, technologies and capacity-building by developed country Parties] and [continue to work cooperatively with other organizations on the broad range of initiatives required to address adaptation.]] [The Convention shall catalyse actions in different sectors, promoting efficient and effective use of the financial resources for adaptation provided under the Convention, and engage in education and training programmes, research and public awareness-raising.]

51. The [Convention [process] [can] [shall]] [Copenhagen Agreement should] facilitate [the knowledge and information sharing and experience at local, national, regional and international levels.] [the provision [and sharing] of appropriate information on the scientific and technical aspects of adaptation, the sharing of experiences and knowledge in implementing adaptation activities [, and the linking of national entities and [implementing agencies]] [relevant international, regional and national organizations and institutions] with necessary expertise] and established processes and/or systems.

52. Particular effort should be taken to enhance cooperation amongst intergovernmental organizations on disaster risk reduction, poverty reduction, and development with the goal of maximizing synergies and avoiding duplication of efforts.

53. International specialized agencies and organizations working on the impact of climate change on water resources, in particular those under the UN, are to be involved in developing the national and international strategies for adaptation in the water sector.

54. [The [scope of][activities undertaken by][outcomes and lessons learned from]] the Nairobi work programme [should continue, including by enhancing the role of regional centres, where necessary, as hubs] [[[is to][should] be enhanced to promote understanding of impacts, vulnerability and adaptation to climate change] and it [should][could] become a hub] [[for knowledge and information sharing and capacity-building] [at regional[,subregional] and national levels]].

55. [Under the adaptation [framework][programme], [the financial mechanism is to be [inclusive, fair and equitable in terms of governance of, and access to, finance, taking into account different national

circumstances.]] [international] institutional arrangements for adaptation [must][should][shall] be [guided][governed] by the following principles [and guiding criteria:]<sup>4</sup>

- (a) Be [fair], effective, efficient and transparent;
- (b) [[Be][Operate] under the authority, and guidance of, and be fully accountable to, the COP;]
- (c) [Be underpinned by the principle of common but differentiated responsibilities and equity;]
- (d) [Have an equitable and geographically balanced representation of all Parties within a transparent and efficient system of governance (Article 11.2);]
- (e) [Ensure recipient country involvement during the stages of identification, definition and implementation, rendering it truly demand driven;]
- (f) [Seek coherence with, and not duplicate, expertise of][Collaborate with] other [actors and entities in relevant fields;] [United Nations organizations, international financial institutions and other relevant international organizations;]
- (g) [Address all aspects of cooperation on technology research, development, diffusion, and transfer in accordance with Article 4.3 and 4.5 and other relevant articles of the Convention, in order to enable adaptation under the relevant paragraphs of decision 1/CP.13;]
- (h) [Act in coordination with existing regional frameworks, and] [encourage [cooperation, where appropriate, on a regional basis] [regional coordination between countries with shared natural resources]] to coordinate efforts;
- (i) [Be supportive of][Build on][Make use of] [existing] [national institutional] arrangements, national platforms, such as those for the Hyogo Framework and expertise to the extent possible].

56. In order to support the implementation of the adaptation [actions][framework][programme], [existing [institutional arrangements][institutions at the international and regional levels] [shall][should] be enhanced] [and][the new institutional arrangements mentioned in paragraph 57 below should be established] with a view to, inter alia:<sup>5</sup>

- (a) [Facilitating][Enhancing][Supporting][Ensuring][Encouraging][Promoting] [[the implementation of] adaptation] [action[s]][framework] [in all countries][in developing country Parties] [at the most appropriate level][including at local, [subnational,] national and regional levels][now, up to and beyond 2012] [, recognizing the important roles of [state and regional] governments and recognizing gender equity as an integral part of effective implementation of adaptation;]
- (b) [Developing broad guidance for developing national adaptation strategies, and providing support for particularly vulnerable countries [least able to adapt] in developing these strategies;]

<sup>4</sup> The principles/guiding criteria related to the various mechanisms/arrangements contained in Adaptation chapter II, section E, FCCC/AWGLCA/2009/INF.1 are grouped in this paragraph.

<sup>5</sup> The objectives/functions/purposes related to the various mechanisms/arrangements contained in Adaptation chapter II, section E, FCCC/AWGLCA/2009/INF.1 are grouped in this paragraph.



- (c) [Strengthening and consolidating][Enhancing][Creating [arenas][platforms] for] sharing [of] information, [knowledge,] [experience] and good practices, [at local, national, regional and international levels, consistent with relevant international agreements], [and forums where different public and private stakeholders can discuss concrete challenges], recognizing the role of national focal points;
- (d) [Disseminating information through regional centres;]
- (e) [Assisting particularly vulnerable developing countries, to, inter alia, develop guidelines for undertaking vulnerability and adaptation assessments, the preparation of national adaptation plans, and integrating adaptation actions into sectoral and national planning; and identifying sources of funding and technical assistance to support specific adaptation actions;]
- (f) [Ensuring that a coherent and coordinated effort is made to support developing country Parties build their resilience to the impacts of climate change and avoid climate change related disasters;]
- (g) Encouraging [international organizations and institutions to support (through their programmes on, inter alia, financial cooperation, capacity-building and institution-strengthening mechanisms)] the integration of adaptation into [local, national and regional] development plans, [including funding for adaptation activities,] [strategies,] programmes [, and priorities];
- (h) [Providing advice and technical support to Parties;]
- (i) [Designing and implementing a new work programme on adaptation;]
- (j) Enhancing scientific monitoring activities to develop ways and means to adapt to the effects of climate change on the ocean;
- (k) [Enabling and supporting the creation of partnerships among companies and research institutions of developed and developing countries, and the Parties, for adaptation technologies and the implementation of adaptation activities;]
- (l) [Achieving accessibility, affordability, appropriateness and adaptability of the technologies required by developing countries for enhanced action on mitigation and adaptation;]
- (m) [Developing non-exclusive and additional mechanisms for the transfer of adaptation technologies;]
- (n) [Achieving adequacy and predictability of funds for technology transfer;]
- (o) [Achieving removal of barriers for technology development and transfer;]
- (p) [Supporting the development and enhancement of endogenous capacities and technologies of developing country Parties;]
- (q) [Overseeing [the level of adaptation][adaptation needs] of developing countries, [assessing capacity-building needs][including finance, technology and capacity-building];]
- (r) [Enabling direct access to funding by the recipients, and ensuring the provision of new and additional, adequate and predictable financing resources for technology transfer;]

- (s) [Receiving and evaluating financial support applications from developing countries for implementation of adaptation projects, programmes and actions;]
- (t) [Planning, organizing, coordinating, monitoring and evaluating international actions on adaptation to climate change, including on the means of implementation;]
- (u) [Monitoring compliance with commitments and pledges made by developed country Parties, and other Parties who voluntarily elect to do so, to provide financial support to particularly vulnerable developing countries;]
- (v) [Overseeing the creation of the necessary funds and insurance mechanisms, and the effectiveness of funds allocated to adaptation [, including to enable and support the creating of partnerships among companies and research institutions of developed and developing countries for adaptation technologies and the implementation of adaptation activities];]
- (w) [Achieving provision of full costs and full incremental costs, as per Article 4.3 of the Convention;]
- (x) [Ensuring the full, effective, and sustained implementation of the Convention, in relation to the implementation of commitments for the provision of financial resources. This is mandated under Articles 4.1, 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention in accordance with Art. 11 defining the financial mechanism under the Convention.]

57. [The following new institutional arrangements [should][shall] be [established][created] [by the COP at its sixteenth session][and report directly to the COP]:

- (a) [A[n] [permanent] adaptation committee;]

[The modalities for operation of the Adaptation Committee shall comprise the following:

- (i) A Facilitative Branch responsible for assessing ongoing work and promoting understanding of the scientific and methodological underpinning of adaptation:
  - Interacting with Parties, agencies and international institutions engaged in existing implementation of adaptation actions;
  - Analysing existing work and identifying best practices for use in relevant circumstances;
  - Identifying gaps in existing work and enhancing action to respond to gaps in existing work;
  - Monitoring compliance by Parties of their commitments to support adaptation;
- (ii) A Technical Advisory Branch which is responsible for:
  - the technical advisory group established to support the Executive Board of the Multi-Window Mechanism;
  - advising on technical matters arising from the work of the Adaptation Committee;

- (iii) A Clearing House and Information Dissemination Branch responsible for dissemination of information generated by the Facilitative and Technical Advisory branches to users at the national level. Its outputs will include:
  - Information on best practices appropriate for specific circumstances;
  - Information on methods and tools;
  - Facilitating the sourcing of relevant expertise for Parties in need of such;
  - Facilitating and implementing training and capacity-building activities at the national and regional levels;
- (iv) The COP shall be responsible for elaborating the modalities for operation and composition of the Adaptation Committee;
- (v) Adaptation actions identified and prioritized by developing country Parties in their national adaptation plans may be submitted to the Adaptation Committee for publication. Adaptation actions submitted for publication should be consistent with national policies, plans and programmes;
- (vi) The Adaptation Committee shall provide guidance and expertise to developing country Parties in the identification and prioritization of adaptation actions for urgent and immediate implementation;
- (vii) The Adaptation Committee shall assist with matching these prioritized adaptation actions to financial and technological support provided by developed countries. The Adaptation Committee will facilitate the review of new and additional developed country commitments under the Convention;
- (viii) Developing countries may seek financial and technological support for adaptation actions through other means;]
- (b) [A Subsidiary Body for Adaptation;]
- (c) [An expert [group][body] on adaptation under [the Subsidiary Body for Adaptation] [adaptation committee];]
- (d) [An adaptation advisory panel evolving from the Least Developed Countries Expert Group;]
- (e) [A [facilitative] mechanism [under the Convention];]
- (f) [Financial and Technology Mechanism on Adaptation under which an Executive Body on Finance and Technology for Adaptation (EBFTA) shall be established and will govern an Adaptation Fund to be also created under the Convention, and be supported by four technical panels on:
  - (i) Research and development;
  - (ii) Capacity-building;
  - (iii) Transfer of technologies for adaptation;
  - (iv) Observation systems and information management;]

- (g) [Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts, which is hereby defined:
- (i) The Multi-Window Mechanism shall be subject to the authority and guidance of the COP and be supervised by an Executive Board of the Multi-Window Mechanism;
  - (ii) The membership of the Board shall be determined by the COP, taking into account the need to ensure that Board members have the appropriate expertise in climate-related insurance matters;
  - (iii) A technical advisory group shall be established under the Technical Advisory Branch of the Adaptation Committee to support the Executive Board of the Multi-Window Mechanism;
  - (iv) The purpose of the technical advisory group shall be to:
    - Facilitate advice and guidance on existing and innovative risk management, risk transfer and risk sharing approaches, including insurance;
    - Identify key climate risk factors and thresholds for insurance payments;
    - Estimate the potential physical and economic impacts of key climate risk factors;
    - Receive reports that key climate risk factor thresholds have been exceeded;
    - Facilitate the verification that key climate risk factor thresholds have been exceeded;
    - Recommend to the Board appropriate financial compensation payments once climate risk factor thresholds have been exceeded.
  - (v) Members of the technical advisory group shall represent a range of technical expertise in the areas of hazard mapping, disaster risk reduction, and insurance and reinsurance.]]

58. [[Parties should designate a national focal point for adaptation][A national focal point should be established] to [enable the effective][address the] implementation of adaptation [programme][actions under the Convention, in particular the development and implementation of national adaptation plans]. Particularly vulnerable developing countries shall be provided with financial and technical assistance to support the work of the national adaptation focal points.]

59. [National and, where appropriate, regional coordinating [bodies][entities] should be established, or enhanced where they exist, to address all aspects of the means of implementation for adaptation, including gender-balanced participation, and to strengthen the institutional capacity of national focal points and all stakeholders.] [All Parties should promote the coordination and sustainability of activities undertaken within this framework, including the efforts of national coordinating mechanisms and entities and focal points.]

60. [National centres and networks as well as regional centres, networks and initiatives could be established or strengthened.] [The COP, in collaboration with other organizations, shall develop regional centres for adaptation. Regional centres will be a key source for guidance, information and expertise within the regions, and Parties will be encouraged to interact with their regional centres for such

support.] [The capacity of existing, relevant national, regional and international institutions should be strengthened to facilitate action on adaptation, including, inter alia:] [Centres, organizations, and/or networks, utilizing existing ones, [shall][should][could] be [established] [, where appropriate,] [or][and][and/or] [strengthened][, where appropriate,][,where they exist,] [,including at the national and regional levels.][, including:]

- (a) [National centres and networks;]
- (b) [Virtual] Regional [[adaptation] centres] [in developing country regions under the authority of the Subsidiary Body for Adaptation.], networks, organizations and initiatives;
- (c) [An international adaptation centre.]

61. [The centres and networks mentioned in paragraph 60 above [should] operate with a view to, inter alia:]

- (a) [[Facilitating][Assisting] the [development and] implementation of [national] adaptation [action[s]][plans] in all vulnerable developing country Parties, [particularly][vulnerable developing countries][vulnerable to the adverse effects of climate change][LDCs and SIDS [and Africa]] through [promoting] research, knowledge sharing, training, capacity-building and the voluntary development, diffusion and transfer of adaptation technology, consistent with relevant international agreements;]
- (b) [Facilitating the implementation of adaptation actions, capacity-building, knowledge sharing, technology development, diffusion and transfer;]
- (c) [Assisting and raising funds for] [Financing the planning] Planning, designing, [implementing,] monitoring and evaluating adaptation activities, and facilitating informed decision-making [at all levels] [at the national and regional levels, especially between countries with shared natural resources], taking gender considerations into account;
- (d) [Assisting Parties to build endogenous capacity for, inter alia: developing analytical tools; undertaking adaptation research and implementation activities; research, development, deployment and transfer of adaptation technologies; awareness-raising; support for pilot projects; and publication of studies on adaptation;]
- (e) Exchanging lessons learned and best practices, and enhancing assessment of the vulnerability of oceans and coasts to the effects of climate change in order to facilitate the implementation of adaptation measures;
- (f) [Contributing to the effectiveness of actions implemented by the relevant bodies established to enhance action on technology transfer (related to Para. 197 in the Chair's text);]
- (g) [Coordinating and disseminating free and timely dissemination of information related to systematic observation and [regional][impacts and response] modelling, for improved vulnerability and adaptation assessments;]
- (h) [Collecting, analysing and disseminating information on past and current practical adaptation actions and measures, including projects, short- and long-term strategies, and local and indigenous knowledge;]

- (i) [Enhancing the capacity of national-level interdisciplinary resource groups that include representatives from universities, scientific research institutions, government, industry and NGOs;]
- (j) [Developing a training programme that allows urban planners to integrate climate risk management into long-term development planning;]
- (k) [Generating and sharing knowledge, and enabling transformation of this knowledge into action;]
- (l) [Strengthening institutions and aiding in development of knowledge platform to enable sharing of research, expertise and data;]
- (m) [Engaging science and policy communities in dialogues to promote effective decision-making related to environment and development issues;]
- (n) [Seeking opportunities and partnerships to build capacity for the use of vulnerability and adaptation assessment methods and tools through new education programmes and advanced study institutions;]
- (o) [Studying the stresses generated by climate change and variability, and estimation of past, current and future climate-related risks (e.g. sea level rise, intensification of storms, especially sand storms.) as well as risks to human health;]
- (p) [Assisting with the formulation and dissemination of guidance for the development of national adaptation plans;]
- (q) [Providing guidance to the financial mechanism on appropriate criteria for approval and disbursement of financing for adaptation;]
- (r) [Provide feedback to the Adaptation Committee on gaps at the national and regional levels that need to be addressed.]

**F. [Monitoring and review of adaptation action and support] [Monitoring and review of enabled and supported adaptation action] [Measures to facilitate adequate adaptation to climate change] [Review of progress]**

62. All Parties, [with additional financial and technical support provided to developing countries,] should [enhance] report[ing] on [measures to facilitate adequate adaptation to climate change in national communications][progress and experience of adaptation action, and of support received or provided to facilitate the monitoring and review of adaptation commitments under the Copenhagen Agreement] [To ensure transparency, mutual accountability and governance, Parties should strive to integrate the monitoring of adaptation actions within existing country and organizational monitoring and evaluation systems.]

63. [Progress [in the compliance of financial commitments of Annex I Parties and][in the delivery of means of implementation to developing country Parties][in the implementation of][under] the adaptation [framework][programme] [is necessarily linked to the finance, transfer of technology and capacity-building. All of these aspects should be monitored and reviewed.] [, including [in] the delivery of means of implementation to [all] developing country Parties, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems that are particularly vulnerable to the adverse effects of climate change and progress in building resilience and reducing vulnerability], [should][must] be [monitored][reviewed][and evaluated] to ensure the [agreed] full implementation of adaptation actions [and commitments of developed country Parties under Article 4.3,

4.4 and 4.5 of the Convention] [supported by finance and technology and commitments relating to financial and technology support [in a measurable, reportable and verifiable manner,] utilizing scientific as well as sex-disaggregated socioeconomic data and in the context of transparency, mutual accountability and robust governance].]

64. [[A [mechanism][system] for monitoring, reporting and/or providing feedback [shall] [should] be established] [for the review of financial commitments for adaptation activities] [for all Parties and adaptation actions as part of the overall reporting system under a new climate regime] [as part of a compliance mechanism][for meeting commitments under Article 4.3, 4.4 and 4.5][with a committee of experts on the implementation of commitments contained in paragraph 4 of the Convention] [[through utilizing] [utilize] existing mechanisms to monitor and evaluate the provision and effectiveness of adaptation support, such as through multilateral funding and ODA channels.]]

65. [[Monitoring][and evaluation] entails, inter alia:] [A monitoring system shall be established for:] [A system for monitoring and reporting shall be established to evaluate the provision of adaptation support, including, inter alia:]

- (a) [Monitoring and recording these financial resources provided by developed country Parties;]
- (b) [Monitoring technology transferred to developing country Parties;]
- (c) [Monitoring [actions by Parties][the utilization and transfer of financial resources to, and support for, capacity-building] [to create enabling environments for technology transfer and adaptation][in developing country Parties][within their respective countries];]
- (d) [Evaluating the effectiveness of the implementation of adaptation actions, projects and programmes;]
- (e) [Evaluating the sufficiency of financial and technology support to developing country Parties [every four years];]
- (f) [Ensuring that effective outcomes are realized from that support;]
- (g) [Determining, and reporting to the compliance committee, any discrepancies between financing and emission reduction commitments and quantities of resources delivered and reductions achieved on a country-by-country basis;]
- (h) [Submitting NAPAs by [the most] [vulnerable developing country Parties [, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems that are particularly vulnerable to the adverse effects of climate change]], [for examination] on a country-by-country basis, which should result in prioritizing actions requiring assistance for implementation.]]

Annex III

**Enhanced action on mitigation**

This annex contains text from the paragraphs at the beginning of the chapter on enhanced action on mitigation on pages 67–73 of the revised negotiating text (FCCC/AWGLCA/2009/INF.1), as reordered by the facilitator of the informal group on mitigation. The approach to the reordering was outlined by the facilitator at the meetings of the group.

The annex contains only material that Parties proposed to be placed before chapter III A of the revised negotiating text FCCC/AWGLCA/2009/INF.2/Add.1. Material that is conceptually similar and could be considered in conjunction with the material in this annex remains where it was originally introduced by Parties.

The paragraphs have been renumbered, starting from 1.

Duplication of identical paragraphs has been removed, and paragraphs with similar content have been grouped together. Paragraphs can be traced to their origin by using the explanatory table contained in annex III to document FCCC/AWGLCA/2009/INF.2/Add.1.

In introducing their text, Parties proposed subheadings, which can be found in document FCCC/AWGLCA/2009/INF.1 but have not been included in this text. The indicative subheadings in the text have been and introduced by the facilitator to indicate the themes around which the text was reordered.

In this annex cross-references refer back to the revised negotiating text (FCCC/AWGLCA/2009/INF).



Structural proposals:

1) Sections A and B of the mitigation chapter should be rearranged according to the following order:

1. A section on policies and measures
2. A section on mitigation obligations by Parties
  - (a) Subsection on commitments by developed countries
  - (b) Subsection on actions by developing countries
3. A section on measurement, reporting, and verification
4. A section on a reviewing mechanism
5. A section on compliance.

2) A new section should be inserted at the beginning of the chapter on mitigation for structural proposals that address both developing and developed country commitments and actions in a unified format.

Annexes should be inserted at the end of the text, to capture, among other things, Parties' quantifiable mitigation commitments and actions.

The mitigation chapter should focus on nationally appropriate mitigation commitments and actions and the measurement, reporting and verification of those commitments and actions. Elements of the text relating to support for mitigation action by developing countries, including the current section on "means of implementation", should be consolidated into a new section in the financing chapter.

A placeholder should be included at the beginning of the mitigation chapter noting that a new section may be required to set out overall mitigation objective or objectives, and guiding principles, should these elements not be included in a shared vision.

The mitigation chapter should therefore be structured into seven sections as follows:

1. Objective and principles (if needed)
  2. Nationally appropriate mitigation commitments and actions (specifically including: Common obligations; National Schedules; Low-Emission Development Strategies; Mitigation by developed countries; Mitigation by developing countries)
  3. REDD
  4. Bunkers
  5. Market mechanisms
  6. Spillover effects
  7. Measurement, reporting and verification
  8. Compliance
- 3) A new section on joint fulfillment
- 4) A new section on LULUCF

*[Introductory material (including objectives, scope and principles)]*

1. Recognizing that largest share of greenhouse gas in the atmosphere are originated from developed countries.
2. Recognizing that the right to development is a basic human right that is undeprivable.
3. Recalling that economic and social development and poverty eradication are the first and overriding priorities of the developing countries.
4. Recognizing that the right to development of developing countries shall be adequately and effectively respected and ensured in the process of global common efforts in fighting against climate change.
5. Given their historical responsibility and development level and based on the principle of equality, developed country Parties shall have deeper cuts in their GHG emissions so as to ensure adequate spaces for developing countries to achieve their goals of substantive development and eradication of poverty. Developing countries should take nationally appropriate mitigation actions in the context of development, supported and enabled by technology, financing and capacity-building from developed countries.
6. Provisions of the Conventions reflected a distinct Developed and Developing Countries' obligations on actions on mitigation based on the principle of common but differentiated responsibilities and respective capabilities, with developed countries should take the lead on such actions.
7. Mitigation commitments by developed countries are distinct from mitigation actions by developing countries in the following way:
  - (a) Mitigation commitments by all developed countries are legally binding economy wide and absolute quantified emission reduction commitments;
  - (b) Mitigation actions by developing countries are voluntary and nationally appropriate actions, supported and enabled by technology, finance and capacity-building, which reduce or avoid emissions relative to baseline.
8. Enhanced national/international action on mitigation of climate change [should/shall] be pursued with the aim of achieving the ultimate objective of the Convention to stabilize greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. All Parties [should/shall] contribute towards this objective, in accordance with their common but differentiated responsibilities and respective capabilities, taking into account their historical responsibility and mitigation potential as determined by their respective national circumstances, social and economic conditions and other relevant factors highlighted in Articles 4.8, 4.9 and 4.10 of the Convention, including their access to alternative energy.
9. In addition to the principles outlined in Article 3 of the Convention, the Parties shall be guided, inter alia, by the following:
  - (a) Developed country Parties should take the lead in combating climate change and the adverse effects thereof;
  - (b) All Parties should contribute to the global effort to combat climate change, in accordance with their common but differentiated responsibilities and respective capabilities – a spectrum of effort is envisaged;

- (c) All Parties should aim to undertake a similar level of effort to others at a similar level of development and with similar national circumstances
  - (d) Those Parties whose national circumstances reflect greater responsibility or capability should make a greater contribution to the global effort.
10. Noting that mitigation and adaptation efforts should be given equal consideration,
11. Ambitious and early mitigation commitments are critical for adaptation. Poor mitigation commitments and actions will impose a higher demand on adaptation measures and will require additional funding.
12. Parties acknowledge that enhanced action on mitigation is urgently required to ensure the stabilization of greenhouse gas concentrations in the atmosphere at a level that would minimize negative impacts on the most vulnerable States, particularly small island developing States and the least developed countries.
13. Parties acknowledge that global efforts must be ambitious, must reflect the urgency of our collective endeavours and must be consistent with a mitigation pathway that safeguards the most vulnerable from the adverse impacts of climate change.
- [Mitigation goals (including those relating to emissions, GHG concentrations and temperature rise)]*
14. Parties recognize that in this context greenhouse gas emissions must be stabilized as far as possible below 350 ppmv CO<sub>2</sub> eq, with temperature increases limited to as far as possible below 1.5 °C above pre-industrial levels; hence global emissions must peak by 2015, and then be reduced by more than 85 per cent below 1990 levels by 2050.
15. Economy-wide emission reductions by all countries shall be set as a stabilization of GHG concentrations in the atmosphere at 350 ppm carbon dioxide equivalent (CO<sub>2</sub> eq) and a temperature increase below 2°C above the pre-industrial level. For this purpose, Parties shall collectively reduce global emissions by at least 45 per cent from 1990 levels by 2020 and by at least 95 per cent from 1990 levels by 2050.
16. To stabilize the concentration of greenhouse gases in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate, the Parties recognize that the global temperature increase should be limited to 2 °C above the pre-industrial level.
17. In accordance with scientific findings, this implies that the aggregate greenhouse gas emissions by developed country Parties shall be reduced by [25–40] per cent by 2020 compared with 1990. Emissions from developing country Parties shall collectively deviate significantly from business as usual by [15–30] per cent by 2020. The global greenhouse gas emissions should peak by 2015.
18. Parties shall further collectively reduce global emissions by 50–85 per cent by 2050 compared with the 2000 level. These collective obligations should be adjusted in accordance with best available scientific information, including the Fifth Assessment Report of the IPCC.
19. The ultimate objective of the Convention [shall] be achieved through a long-term global goal for emissions reductions with a view to stabilizing atmospheric concentrations of greenhouse gases at [xxx ppm] by 20xx so as to reduce the probability of a rise in global temperature rise greater than [x °C]. In this regard, global greenhouse gas emissions should peak by [20xx] and decrease thereafter. To this end, developed country Parties and other Parties included in Annex I to the Convention, as a group, [shall/should] reduce their greenhouse gas emissions by [25–40] per cent from 1990 levels by 2020. Supported and enabled by technology, financing and capacity-building from developed country Parties and other developed Parties included in Annex II to the Convention, the greenhouse gas emissions of

Parties not included in Annex I to the Convention [shall][should], as a group, significantly deviate from baselines by 2020.

20. The objective of [this Agreement] [the Parties] is to achieve an environmentally sound response to climate change through effective implementation of the Convention, with a view to achieving its ultimate objective, as provided in its Article 2, by stabilizing atmospheric greenhouse gases at 450 ppm CO<sub>2</sub> eq or lower, through unified long-term action that sets the world on a path to peak global emissions by [X] and then reduce global greenhouse gas emissions by X per cent by [X] on [X] levels.

*[Frameworks for mitigation action by all Parties (including schedules, low carbon development strategies and measurement, reporting and verification)]*

21. Recalling Article 4.1(b) of the Convention, under which all Parties shall “[f]ormulate, implement, publish and regularly update programmes containing measures to mitigate climate change...”.

- (a) Parties shall implement their respective nationally appropriate mitigation action(s) reflected in Appendix 1;
- (b) In addition, Parties shall formulate and submit low-carbon strategies that articulate an emission pathway to 2050 (as specified in para. 62 (alternative) and in para. 74, Option 3.2 (alternative), );
- (c) Mitigation action is subject to measurement, reporting and verification, as reflected in an appropriate Appendix.

Appendix 1 – Mitigation
[to be filled in as per paragraphs x.1 above, paragraph 62 (alternative) below and paragraph 74, Option 3.2 (alternative), below]
Alphabetical list of UNFCCC Parties

22. Recognizing that the circumstances of countries naturally evolve over time, paragraph 62 (alternative) below shall apply, when Appendix 1 is next updated, to other Parties in accordance with objective criteria of economic development.

23. This Agreement does not affect the ability of Parties to establish emissions trading linkages between or among themselves.

24. *Placeholder paragraph recognizing the common obligations of all Parties under Article 4 and other relevant articles of the Convention.*

25. Each Party (except the least developed countries) would be required to:

- (a) Maintain a national schedule
- (b) Meet and/or implement the nationally appropriate mitigation commitments and/or actions registered in its national schedule;
- (c) Measure and report on the outcomes of these commitments and/or actions.

26. Each Party would be required to register in its national schedule:

- (a) A national emissions pathway to 2050;

- (b) Quantifiable nationally appropriate mitigation commitments and/or actions for the agreed commitment period.
27. The required content for Parties' national schedules is as follows:
- (a) A brief description of each commitment or action;
  - (b) Whether it is to be taken on an economy-wide basis, or, if not, the section in which the commitment or action is to be taken;
  - (c) The baseline or reference case against which the commitment or action shall be measured, reported and verified;
  - (d) An estimate of the emissions limitation or reduction outcomes expected from the commitment or action or an aggregation of commitments and/or actions;
  - (e) Whether the commitment or action is to be taken unilaterally and/or is enabled by previously agreed financial, technology and/or capacity-building support.
28. Examples of possible commitments and actions include:
- (a) Quantified emission limitation or reduction commitments in economy-wide or sectoral terms;
  - (b) Quantified emission limitation or reduction actions on an economy-wide or sectoral basis;
  - (c) Emissions intensity commitments or actions;
  - (d) Clean energy commitments or actions;
  - (e) Energy efficiency commitments or actions;
  - (f) Emissions thresholds aimed at protecting and enhancing sinks and reservoirs;
  - (g) Other actions aimed at achieving quantified emission limitation or reduction outcomes.
29. The minimum expectations with regard to the commitments and actions that Parties would register in their national schedules would be:
- (a) For all developed country Parties, an economy-wide quantified emission limitation or reduction commitment (*note: para. 55 could be copied here*);
  - (b) For developing country Parties whose national circumstances reflect greater responsibility or capability, nationally appropriate mitigation commitments and/or actions aimed at achieving substantial deviation from baselines.
30. The registration of mitigation commitments and actions in national schedules would provide recognition of all Parties' contributions to the global effort to combat climate change.
31. *Placeholder to note that further paragraphs would be required to describe in more detail how national schedules would be negotiated, and how they would operate (including enhancement and amendment procedures).*
32. Taking into account their common but differentiated responsibilities and respective capabilities, their specific national and regional development priorities, objectives and circumstances, and their mitigation potential, with a view to achieving an aggregate reduction in global greenhouse gas emissions

of at least 50 per cent by 2050, all Parties shall formulate, regularly update and implement the contents of national schedules annexed to this agreement.

33. Each Party's national schedule shall include:

- (a) A long-term national greenhouse gas emissions limitation or reduction pathway;
- (b) A country-driven nationally appropriate mitigation strategy, differentiated in terms of the ambition, timing and scope of its mitigation commitments or actions, which could be, inter alia, project-based, sectoral or economy-wide.
- (c) Each Party's nationally appropriate mitigation strategy shall include:
  - (i) Except for the least developed countries and small island developing States, quantified emissions limitation or reduction commitments for 2020, consistent with its long-term national greenhouse gas emissions limitations or reduction pathway, subject to regular review; and
  - (ii) Measurable, reportable and verifiable mitigation policies and measures to meet its quantified emissions limitation or reduction commitments for 2020, as appropriate, and to support its national greenhouse gas emissions limitations or reduction pathway, subject to regular review.

34. All countries prepare low emission development strategies. *Note that further paragraphs would be required to describe in more detail their function and relationship to the national schedules described above and a potential facilitative/matching platform.*

35. All Parties shall develop and regularly update and submit information relating to the implementation of their nationally appropriate mitigation strategies. Such information shall be reviewed and verified according to agreed rules and guidelines.

36. All Parties, except for the least developed countries and small island developing States, shall develop and regularly update and submit a national inventory of anthropogenic emissions by sources and removals by sinks of all gases not controlled by the Montreal Protocol.

37. National inventories shall be:

- (a) Undertaken in accordance with the latest agreed Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories; and
- (b) Submitted, reviewed and verified according to agreed frequencies, rules and guidelines.

Annex III A

**Enhanced action on mitigation**

**Mitigation [commitments] by [developed country Parties]**

This annex contains text from paragraphs 55–69 (pages 73–84) of the revised negotiating text (FCCC/AWGLCA/2009/INF.1), as reordered and consolidated by the co-facilitator of the informal group on mitigation. The consolidation and reordering has been undertaken in line with the approach presented to the group at the informal meeting of the AWG-LCA held in Bonn, Germany, in August 2009.

The paragraphs have been numbered, starting from 1.

The following reordering of paragraphs has been undertaken:

- Paragraphs 55 and 60–64 of document FCCC/AWGLCA/2009/INF.1 are clustered into two categories: “[mitigation commitments or actions]” and “[achieving quantified emission limitation and reduction objectives]”;
- The text relating to comparability (paras. 56–59 and 65 of document FCCC/AWGLCA/2009/INF.1) has been moved to the beginning of section III A1.

Paragraphs can be traced to their origin by using the explanatory table contained in annex III A to document FCCC/AWGLCA/2009/INF.2/Add.1.

Structural proposals:

1) Move paragraphs 24–30 (paras 60–64, page 80 of document FCCC/AWGLCA/2009/INF.1) to a new subsection on low-emission development strategies.

2) Move the section on MRV (section 2, page 81 of document FCCC/AWGLCA/2009/INF.1) to a proposed new stand alone/unified section on MRV.

3) Move the section on compliance (section 3, page 82 of document FCCC/AWGLCA/2009/INF.1) to a proposed new stand alone compliance section.

4) Move paragraphs 31–38 (paras 66–68, pages 81–82 of document FCCC/AWGLCA/2009/INF.1) to a proposed section on elements that apply to all Parties.

5) Replace the whole section on MRV for 1(b)(i) with the following sentence: “MRV of developed countries’ commitments should be treated in an integrated manner with MRV of developing countries’ actions”.

Proposals for an additional section on Policies and measures by all Parties<sup>1</sup>

1. Each Party shall, to the extent practicable, in implementing relevant Articles of this Protocol:
  - (a) Implement and/or further elaborate policies and measures in accordance with its national circumstances, such as:
    - (i) Enhancement of energy efficiency in relevant sectors of the national economy;
    - (ii) Protection and enhancement of sinks and reservoirs of greenhouse gases not controlled by the Montreal Protocol, taking into account its commitments under relevant international environmental agreements; promotion of sustainable forest management practices, afforestation and reforestation;
    - (iii) Promotion of reducing emissions from deforestation and forest degradation;
    - (iv) Promotion of sustainable forms of agriculture in the light of climate change considerations;
    - (v) Promotion of measures for adaptation to the adverse effects of climate change;
    - (vi) Research on, and promotion, development and increased use of, new and renewable forms of energy, carbon dioxide sequestration technologies and advanced and innovative environmentally sound technologies;
    - (vii) Progressive reduction or phasing out of market imperfections, fiscal incentives, tax and duty exemptions and subsidies in all greenhouse gas emitting sectors that run counter to the objective of the Convention and application of market instruments;
    - (viii) Encouragement of appropriate reforms in relevant sectors aimed at promoting policies and measures which limit or reduce emissions of greenhouse gases not controlled by the Montreal Protocol;
    - (ix) Measures to limit and/or reduce emissions of greenhouse gases not controlled by the Montreal Protocol in the transport sector;
    - (x) Limitation and/or reduction of methane emissions through recovery and use in waste management, as well as in the production, transport and distribution of energy;
  - (b) Cooperate with other Parties to enhance the individual and combined effectiveness of their policies and measures adopted under this Article. To this end, these Parties shall take steps to share their experience and exchange information on such policies and measures, including developing ways of improving their comparability, transparency and effectiveness.
2. The Parties shall pursue limitation or reduction of emissions of greenhouse gases not controlled by the Montreal Protocol from aviation and marine bunker fuels, working through the International Civil Aviation Organization and the International Maritime Organization, respectively.

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<sup>1</sup> Co-facilitator's note: Parties may wish to consider whether the text within the proposed additional section on policies and measures by all Parties (paras 1–3) should be considered as part of the section on paragraph 1(b)(i) of the Bali Action Plan or elsewhere in the document.



3. The Parties shall strive to implement policies and measures under this Article in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially developing country Parties and in particular those identified in Article 4, paragraphs 8 and 9, of the Convention, taking into account Article 3 of the Convention. The Conference of the Parties serving as the meeting of the Parties to this Protocol may take further action, as appropriate, to promote the implementation of the provisions of this paragraph based on the information provided by affected Parties.

1. Nationally appropriate mitigation commitments or actions by developed countries

*National circumstances and comparability of efforts*

4. To enhance mitigation commitments under Article 4.2(a) and (b) of the Convention, developed country Parties in Annex I of the Convention shall:

- (a) in a context of enhanced implementation, adopt economy-wide quantified emission reduction commitments that are comparable, and that the commitments for the second commitment period under the Kyoto Protocol shall be the reference for enhanced commitments under paragraph 1(b)(i) of the Bali Action Plan;
- (b) apply the concept of “nationally-appropriate” for Annex I countries in a compatible manner with economy-wide quantified emission reduction commitments for all Annex I Parties;
- (c) recognizing that the concept of comparability is established under the Bali Action Plan and not in a process under the Kyoto Protocol, ensure that comparability among all Annex I Parties shall express itself in magnitude, form, and in compliance requirements.

5. [Comparability of mitigation efforts by [developed country Parties] [shall] [should] be ensured through

- (a) [Their [[magnitude] [, using tonnes of CO<sub>2</sub> eq as a unit of comparability] [level of mitigation ambition]]];
- (b) [Their [[form[nature] and] legal effect];]
- (b).1 A more robust and stricter compliance mechanism than that in the first commitment period of the KP, including increased caps for emission reductions for non compliant Parties within an agreed timeframe;
- (c) [Consistency with [relevant provisions of the Kyoto Protocol [and] related decisions of the COP [and the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP) applying to the first commitment period]], [including requirements for compliance, monitoring and enforcement];]
- (d) [Time frames [commitment periods] and the application of the same base year established by the Kyoto Protocol.] ]
- (e) [Magnitude, form and compliance requirements]
- (f) [The extent to which they address their emission debt]

Alternative 1 to para 5

- [(a) Comprehensiveness: targets, policies, measures, actions and etc.;
- (b) Same nature of commitments: quantified and legally-binding;

- (c) Proximity of magnitude and intensity;
- (d) Same compliance, monitoring and verification mechanism.]

Alternative 2 to para 5

- [(a) The establishment or reaffirmation of legally-binding quantified emission limitation or reduction commitments stated relative to 1990 or to other base years consistent with Article 4.6 of the Convention and decision 9/CP.2;
- (b) Timeframes for emission reductions that are of the same duration;
- (c) Comparable provisions for monitoring, reporting and verification of emissions by sources and removals by sinks;
- (d) Provisions for third party review of annual emissions inventories and any supplemental information required;
- (e) Comparable compliance requirements for all Annex I Parties.]

Alternative 3 to para 5

- [(a) Comparable emission reduction or limitation objectives, using economy-wide emission reduction/limitation targets under the Kyoto Protocol as a reference;
- (b) Similar legal nature of commitments;
- (c) Similar requirements for measurement, reporting and verification;
- (d) Similar provisions for compliance. ]

6. Ensuring comparability of efforts in a transparent manner among developed countries mitigation efforts will require the establishment of specific indicators in order to compare compliance with country commitments and define which national circumstances are taken into consideration.

7. [In assessing comparability of efforts by [developed country Parties], the following factors [shall] [should] be taken into account:

- (a) [Historical responsibility for [both] [emissions] [as well as] [and] [global temperature increase]; ]
  - (a).1 Share of absolute greenhouse gas emissions
- (b) [National [and regional] development priorities;]
- (c) [Natural and geographical characteristics;][and] resource endowment;]
- (d) [Availability of [low-carbon] [low-GHG emission] energy supply options and opportunities for fuel switching;]
- (e) [[Trends in] [GHG] emissions [per capita][,][and carbon intensity] [[per unit of gross domestic product (GDP)], [per energy unit][and population trends]]; ]
  - (e).1 Population trends
- (f) [Domestic mitigation potential [and mitigation costs, aggregate [and marginal] economic costs, domestic achievement of emission reduction and per capita effort;] ]

- (g) [Sector-specific circumstances and sectoral energy efficiency and [GHG][carbon ] intensity;]
- (g).1 Covering all sectors and all GHG emissions;
- (h) [Degree of access to flexibility mechanisms;]
- (i) [[Relative][Absolute] size of the economy; [and relative ]ability to pay [, and economic and technological capacity];]
- (i).1 Technological capacity;
- (j) [Extent of transition to a market economy;]
- (k) [Position on the human development index.]
- (l) [Methodologies used for calculation of reduction potentials and setting quantified national GHG emissions reduction targets should allow the setting of equitable burden sharing which is measurable, reportable, and verifiable;]
- (m) [the extent of international assistance provided by World Bank or IBRD;]
- (n) [Responsibility of Annex I Parties, individually and jointly, for current atmospheric concentrations of greenhouse gases;]
- (o) [The historical and current per-capita emissions originating in developed countries;]
- (p) [The share of global emissions required by developing countries in order to meet their social and economic development needs.] ]

Alternative 1 to para 7:

[To facilitate understanding of comparability of effort, each [developed country Party's] schedule shall be subject to regular and transparent review.]

Alternative 2 to para 7:

[In view of the need to ensure comparability of efforts, the development of quantified emission limitation and reduction objectives should be guided by considerations of capability and responsibility, taking into account such factors as:

- (a) the capability to pay for domestic emission reductions and to purchase emission reduction credits from developing countries;
- (b) the GHG emission reduction potential;
- (c) domestic early action to reduce GHG emissions;
- (d) population trends and total GHG emissions.]

Alternative 3 to para 7:

[Quantified emission limitation and reduction objectives shall reflect developed countries' historical responsibility and capability.]

Proposed new subheading: Comparability of efforts between large and small Parties

8. [Due consideration should be given to comparability of efforts between large and small Parties. Small Parties should not face disproportionate disadvantages due to lack of flexibility of action because of the size of their economy, limited opportunities for fuel switching, and other factors. ] [The mitigation commitment of a Party where a single project adds in any one year more than five per cent to the total

carbon dioxide emissions of the Party in 1990, shall be adjusted by subtracting the proportional impact provided the following conditions: (i) the total carbon dioxide emissions of the Party were less than 0.05 per cent of the total carbon dioxide emissions of Annex I Parties in 1990, (ii) renewable energy is used for the single project, resulting in a reduction in greenhouse gas emissions per unit of production, and (iii) best environmental practice is followed and best available technology is used to minimize process emissions.]

9. [ [Suitable criteria [, agreeable to every Party,] should be used in defining “developed country Parties”.] [There should be a dynamic continuum with different commitments, actions and support for different countries based on common, objective criteria.] ]

10.

Option 1

[An objective, consistent, transparent, thorough and comprehensive technical assessment of the comparability of efforts among [developed country Parties] shall be [facilitated][made] by a technical panel on comparability [established under the COP]. The panel shall assess the information provided by [developed country Parties] in their annual national communications [and other data available by international organizations] and report its findings to the COP [and CMP] for further action. If the report indicates questions relating to comparability, the COP shall refer the matter to a compliance committee for attention.]

Option 2

[The assessment of comparability needs to be made under both the COP and Conference of Parties serving as the meeting of Parties (CMP) for [developed country Parties], through formulating a technical panel (including members from Annex I and non Annex I as well as representative from secretariat) on comparability that would assess the information provided by [developed country Parties] in their annual national communications and report its finding to the COP and CMP for further action].]

*Alternative to para 10:*

[An international compliance mechanism should be established under the Convention in order to compare efforts among developed countries mitigation actions and ensure its effective compliance.]

11. [[Developed country Parties] shall achieve their quantified emission limitation and reduction objectives

Option 1

[exclusively through domestic action.]

Option 2

[primarily through domestic emission reductions efforts.] [A maximum of [X] per cent of their commitments should be achieved through the use of [flexible] [carbon market] mechanisms, including offsets].

Option 3

[through a combination of domestic emission reductions efforts and [flexible] [carbon market] mechanisms.] [A maximum of [X] per cent of their commitments should be achieved through the use of [flexible] [carbon market] mechanisms, including offsets]. ]

12. Definitions, modalities, rules and guidelines for the treatment of land use, land use change and forestry under the Kyoto Protocol shall apply to all [developed country Parties].

*[Mitigation commitments or actions]*<sup>2</sup>

13. To enhance mitigation commitments under Article 4.2(a) and (b) of the Convention, developed country Parties in Annex I of the Convention shall:
- (a) in establishing the magnitude of mitigation commitments, reflect historical responsibility for climate change and ensure ambitious mid-term mitigation commitments for Annex I Parties as a whole compatible with an ambitious long-term target;
  - (b) adopt policies and measures in the form of economy-wide quantified emission reduction commitments;
14. Annex I Parties collectively, whether or not Parties to the Kyoto Protocol, must reduce their emissions by at least 45 per cent below 1990 levels by 2020 and by more than 95 per cent below their 1990 levels by 2050.
15. The Annex I Parties shall individually or jointly reduce their anthropogenic GHG emissions by at least 40 per cent below the 1990 baseline by 2020.
16. Consideration of commitments or actions by developed country Parties requires close coordination with the discussions at the AWG-KP.
17. [All [developed country Parties] [shall][should] [individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the GHGs listed in (x) do not exceed][take leadership to] adopt [legally binding] [measurable, reportable and verifiable] [[nationally appropriate] mitigation commitments or actions] [expressed as] [including] [economy-wide] quantified emission limitation and reduction [objectives<sup>3</sup>] [for [up, to and beyond 2012] the period from [1990][2013] [XXXX] until [2017] [2020] [XXXX],] [as inscribed in Annex X] [of at least 40per cent relative to 1990, by 2020] while ensuring comparability of efforts among them,[ based on their historical responsibility,] [[taking into account] [national circumstances for Parties “with economies that are highly dependent on income generated from the production, processing and export and/or consumption of fossil fuels” as specified in Article 4.8 (h)] [differences in their national circumstances]]. [These commitments or actions shall be inscribed in [Annex ...] [[Appendix ...][Schedule ...][...]]] [with a view to collectively reducing their GHG emissions in the order of 30 per cent from 1990 levels by 2020]

*Alternative 1 to paragraph 17:*

[All Annex I Parties shall adopt quantified emission reductions commitments required from developed countries should include: aggregate emission reductions of at least 45 per cent by 2020 and at least 95 per cent by 2050, both with respect to 1990 levels. Quantified emission reductions commitments by developed countries shall be measurable, reportable and verifiable according to the Bali Action Plan.]

*Alternative 2 to paragraph 17:*

[All developed country Parties and countries that are voluntarily wish to be treated as developed countries shall adopt legally binding mitigation commitments or actions.]

*Alternative 3 to paragraph 17:*

[Developed countries shall undertake measurable, reportable and verifiable legally-binding deeper quantified emission reduction commitments. Given their historical responsibility and based on the

<sup>2</sup> Co-facilitator's note: This provisional heading is suggested in order to improve readability; it can be changed or deleted later if Parties so decide.

<sup>3</sup> The term “quantified emission limitation and reduction objectives” is used in paragraph 1 (b) (i) of the Bali Action Plan and is used in this document without prejudice to the outcome of the negotiations on this matter. Alternative formulations used by Parties include: “quantified emission reduction objectives”, “quantified emission reduction commitments”, “quantified emission reduction targets” and “quantitative emissions reductions/removals”.

principle of equality, developed countries shall reduce their GHG emissions in aggregate by at least 40 per cent below their 1990 levels by 2020 and take corresponding policies, measures and actions.]

*Alternative 4 to paragraph 17:*

[All developed country Parties [shall] adopt legally binding mitigation commitments including economy-wide quantified emission reduction objectives for the period from [2013] until 2020, while ensuring comparability of efforts among them, taking into account differences in their national circumstances. These commitments or actions shall be inscribed in [Annex...].]

18. The Parties included in Annex I shall, individually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases do not exceed their assigned amounts, calculated pursuant to their quantified emission reduction commitments, with a view to reducing their overall emissions of such gases by at least 40 per cent below 1990 levels by 2020 and by at least 95 per cent by 2050.

*[Achieving quantified emission limitation and reduction objectives]<sup>4</sup>*

19. Adopt national policies and take corresponding measures on the urgent mitigation of climate change, by limiting their anthropogenic emissions of greenhouse gases and protecting and enhancing their greenhouse gas sinks and reservoirs, and that these policies and measures will demonstrate that the developed countries are taking the lead in modifying longer term trends in anthropogenic emissions consistent with the objective of the Convention ensure that this enhanced mitigation does not affect the legal status and continued effectiveness of the quantified emission reduction commitments of Annex I Parties that are Parties to the Kyoto Protocol of the UNFCCC.

20. The minimum expectations with regard to the commitments and actions Parties would register in their national schedules would be for all developed country Parties, an economy-wide quantified emission limitation or reduction commitment.

21. [Schedules should be used to register nationally appropriate mitigation commitments and actions.]

22. Developed country Parties which have not taken commitments prescribed in Article 3 of the Kyoto Protocol, and other Parties who voluntarily elect to do so, shall individually or jointly, undertake verifiable, nationally appropriate mitigation commitments or actions in the form of quantified emission limitation and reduction commitments.

23. In the post-2012 agreement, the developed countries will adopt legally binding commitments, by means of the examinations of commitments and activities that have to be measurable, reportable and verifiable (according to para. 1(b)(i) of the BAP) quantifying absolute emission reductions, focusing on those sectors, sources and gases that contribute most to total greenhouse gas emissions and facilitate the transition towards the low carbon economies in order to achieve sustainable development.

24. Option 1

[Quantified emission [limitation and] reduction [objectives] [commitments] for [developed country Parties] shall be those inscribed in Annex B to the Kyoto Protocol as amended [shall be taken as reference], and quantified emission [limitation and] reduction [objectives] [commitments] for those [developed country Parties] that are not Parties to the Kyoto Protocol shall be as contained in ([the annex of the current instrument]...). The commitments under the Kyoto Protocol [shall] be taken as a reference [; commitments] [Commitments] for those developed country Parties that are not Parties to the

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<sup>4</sup> Co-facilitator's note: This provisional heading is suggested in order to improve readability; it can be changed or deleted later if Parties so decide.

Kyoto Protocol [shall] [thus] be comparable [with][to the] commitments taken by [developed country Parties] under the Kyoto Protocol, including with regard to the base year used to express them. ]

Option 1.1

Measurable, reportable and verifiable nationally appropriate mitigation commitments shall be expressed as quantified emission limitation and reduction objectives (QELROS). For countries that are Parties to the Kyoto Protocol, the QELROS shall be expressed as a reduction in 2020 compared to total reported emissions falling within limits set by the Kyoto Protocol and relevant COP and CMP decisions during the first commitment period.

25. Developed country Parties that are also Party to the Amendment to the Kyoto Protocol may in order to achieve their quantified emission limitation and reduction objectives, utilize the flexible mechanisms established in terms of the Kyoto Protocol.

26. Option 2

[Developed country Parties] shall, individually or jointly, ensure that their aggregate anthropogenic CO<sub>2</sub> emissions of the GHGs listed in (...) do not exceed, in the commitment period 2013 to [20XX], their respective [assigned amounts] [mitigation target taking into account their historical responsibility would be inscribed in (...).] [Annex B (see below) which are established in a manner ensuring comparability of efforts of each Party, taking into account national and sectoral aspects, in order to take the lead in combating climate change, with a view to contributing to the global efforts towards the peaking-out of the global emissions of greenhouse gases in the next ten to twenty years, and to ensuring a long-term pathway for each Party included in Annex I towards significant emission reduction].]

*Proposal for an Annex in the context of paragraph 26:*

Annex B

Party	Quantified emission limitation or reduction commitment in the commitment period 2013-20xx				
	Assigned amount (Gg-CO <sub>2</sub> e)	reduction rates from 1990 (per cent)	reduction rates from 2000 (per cent)	reduction rates from 2005 (per cent)	reduction rates from 2007 (per cent)
A	xxx	xxx	xxx	xxx	xxx
B	xxx	xxx	xxx	xxx	xxx
...	...	...	...	...	...

27. Parties that undertake such actions or commitments as described in paragraph 22 above shall ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of greenhouse gases do not exceed their agreed targets inscribed in Annex (see below) for the assessment period 2012-2017.

*Proposal for an Annex in the context of this addition:*

Annex I	
Party	Quantified emission limitation or reduction commitment or action for assessment period 2012-2017 compared with 1990 base year

## 28. Option 3

[Recalling Articles [4.1(b)][2(a)] [and 4.2] of the Convention, [developed country Parties] shall implement their respective nationally appropriate mitigation [commitments or actions] [action], [which are measurable, reportable and verifiable,] including quantitative emission [limitation and reduction objectives] [reductions] and/or removals in the 2020/(...) time frame[, in conformity with domestic law] [and adjusted through multi-lateral negotiations]. They shall also formulate [, submit and implement] [and submit] low-emission<sup>5</sup> strategies [that articulate an emission pathway[s] to 2050] [in pursuit of their quantified emission reduction commitments for 2020 and 2050], including long-term net emission reductions of at least [(...)] [40 per cent from 1990 levels by 2020 and 95 per cent][(...)] by 2050. Mitigation [commitments or] action[s] [commitments by all developed countries shall be] [is][shall be] subject to measurement, reporting and verification [according to internationally agreed guidelines] [and compliance].]

*Alternative to paragraph 28:*

[Recalling Article 4.1(b) of the Convention and recognizing that the levels of ambition expected of Parties will necessarily evolve over time as their respective national circumstances and respective capabilities change:

With respect to developed country Parties:

- (a) For each such Party, Appendix 1 (*found in Addition 2 under proposals for additional sections/subsections at the beginning of Chapter III*) includes quantitative emissions reductions/removals in the 2020/[Annex] timeframe, in conformity with domestic law.
- (b) Each such Party shall formulate and submit a low-carbon strategy for long-term net emissions reductions of at least [Annex] by 2050.]

## 29. Option 4

[Each [developed country Party] shall establish, regularly update and implement the contents of national schedules, which [shall][should] include long-term national GHG limitation or reduction pathways, quantified emission limitation or reduction commitments for 2020, and measurable, reportable and verifiable mitigation policies and measures designed to meet those commitments, subject to regular review by the COP. Each national schedule [shall][should] provide details on the goals, policies and measures that underpin the Party's commitments, including details on (1) expected emission reduction pathways, including mid- and long-term emission reduction goals, and (2) enabling domestic measures, such as emissions trading regimes and renewable energy targets.]

## 30. Option 5

[Each Party should decide on a suitable commitment for itself, choosing whether to undertake quantified emission reduction and limitation commitments or nationally appropriate mitigation actions, and whether such commitments or actions will be undertaken voluntarily or in a legally binding context either internationally or domestically.]

2. Measurement, reporting and verification of commitments or actions]

31. [The current system for reporting and review of national communications and national GHG inventories under the Convention, with its independent review structure, provides a basis for the measurement, reporting and verification of mitigation commitments or actions by [developed country

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<sup>5</sup> Parties in their submissions refer either to “low-emission” or “low-carbon” in their proposals of strategies or plans. For the purpose of this document, “low-emission” is used as a more inclusive term pending the outcome of negotiations on this issue.



Parties]. In the implementation of measurement, reporting and verification, relevant provisions of Articles 5, 7 and 8 of the Kyoto Protocol and related decisions [shall] [should] be applied. These procedures [shall] [should] be [further strengthened] [made more stringent]. The COP shall review and finalize the principles, modalities, rules and guidelines for measurement, reporting and verification, including those relating to quantified emission limitation and reduction commitments.]

*Alternative to paragraph 31:*

[The quantified emission reduction targets and corresponding policies, measures and actions undertaken by developed countries shall be measurable, reportable and verifiable. The measurable, reportable and verifiable requirement shall apply to the progress and results of implementation actions as well as the quantified emission reduction commitments per se, which shall apply, mutatis mutandis, the provisions and procedures of the Kyoto Protocol regarding compliance, monitoring and verification mechanisms.]

32. Measurement, reporting and verification shall include an assessment of costs and adverse impacts of the mitigation actions, policies and measures, in particular impacts on the developing countries specified in Article 4.8 (h), as well as an assessment of efforts to eliminate such adverse impacts.

33. The COP shall define the relevant principles, modalities, rules and guidelines, in particular for verification, reporting and accountability for implementation of quantified emission limitation and reduction commitments.

34. *[Issues identified by Parties in the context of the paragraphs above as requiring further elaboration at the appropriate time include modalities for implementing measurement, reporting and verification, including revision or development of relevant guidelines.]*

3. [[Compliance with] [Review of] quantified emission [limitation and] reduction [objectives] [commitments or obligations]]]

35. Develop a compliance system built on the existing mechanisms that address issues of non-compliance flowing from the measurement, reporting, and verifying process.

36. To ensure compliance under the Convention, operationalize Article 13 of the Convention, through the adoption of Decision 10/CP.4 on the multilateral consultative process, and its Annex on its Terms of Reference.

37. [[Compliance with] [Review of] quantified emission [limitation and] reduction [objectives][commitments] [and financial commitments for adaptation and technology transfer] undertaken by [developed country Parties] [shall][should] be monitored and assessed in a robust and credible manner based on agreed procedures for measurement, reporting and verification. [The monitoring and assessment of compliance [shall][should]]]

[Option 1

utilize the relevant procedures implemented under the Kyoto Protocol. These provisions may be enhanced as appropriate, [taking into account experiences gained from relevant international agreements].]

[Option 2

[be undertaken within a [new compliance system [under the COP] [under the new agreement]] [review process]. ]]

38. [The monitoring and assessment of compliance [shall][should]]

[Option 1

[lead to the application of penalties for non-compliance, including increased future reduction commitments by an amount calculated as a multiple of the shortfall in implementation and financial contributions as penalties or fines and paid into an enhanced financial mechanism monetary penalties to be paid to the Adaptation Fund)] [taking into account experiences gained from relevant international agreements].]

[Option 2

[utilize procedures and mechanisms to address cases of non-compliance determined by the principle that they should be designed to facilitate compliance in the future. ]]

[Option 3

[lead to the application of penalties for non-compliance, including [increased future reduction commitments by an amount calculated as a multiple of the shortfall in implementation [and] [as well as ] financial contributions as penalties [10 times to the market price of one tonne of carbon and ] [or] fines [and] paid into [an enhanced] [the Convention] financial mechanism][monetary penalties to be paid to the Adaptation Fund][a mechanism that establishes clear and direct consequences for non-compliance].]]]

Alternative to paragraphs 37 and/or 38:

[The compliance procedures applied to Kyoto Parties under Section XV of the annex to decision 24/CP.7 and that are relevant to quantified emission limitation or reduction commitments shall be applied equally to all Annex I Parties, whether or not Parties to the Kyoto Protocol. Such compliance procedures may be enhanced.]

39. Commitments or actions undertaken by Parties identified in paragraph 22 above shall be subject to compliance provisions and shall be guided by the compliance procedures developed pursuant to Article 18 of the Kyoto Protocol.

40. Parties undertaking commitments or actions under paragraph 22 above shall not use these commitments to fulfil obligations established under the Kyoto Protocol.

41. *[Issues identified by Parties in the context of paragraphs above as requiring further elaboration at the appropriate time include modalities for the implementation of compliance procedures, including revision or development of relevant guidelines; and the possibility of establishing a new body for compliance and for measurement and reporting.]*

*Proposed new subsection on joint fulfilment:*

42. Any Parties included in Annex I that have reached an agreement to fulfil their respective commitments under subparagraph (a) above jointly, shall be deemed to have met those commitments provided that their total combined aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases listed in Annex A do not exceed their assigned amounts inscribed in Annex B. The respective emission level allocated to each of the Parties to the agreement shall be set out in that agreement.

43. The Parties to any such agreement shall notify the secretariat of the terms of the agreement on the date of deposit of their instruments of ratification, acceptance or approval of this Protocol, or accession thereto. The secretariat shall in turn inform the Parties and signatories to the Convention of the terms of the agreement. Any such agreement shall remain in operation for the duration of the commitment period referred to in subparagraph (a) above.

44. If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization, any alteration in the composition of the organization after adoption of this Protocol shall not affect existing commitments under this Protocol.

45. In the event of failure by the Parties to such an agreement to achieve their total level of emission reductions, each Party to that agreement shall be responsible for its own level of emissions set out in the agreement.

46. If Parties acting jointly do so in the framework of, and together with, a regional economic integration organization which is itself a Party to this Protocol, each member State of that regional economic integration organization individually, and together with the regional economic integration organization, shall, in the event of failure to achieve the total combined level of emission reductions, be responsible for its level of emissions as notified in accordance with subparagraph (ii) above.

*Proposed new subsection on LULUCF:*

47. The net changes in greenhouse gas emissions by sources and removals by sinks resulting from direct human-induced land-use change and forestry activities, limited to afforestation, reforestation and deforestation since 1990, measured as verifiable changes in carbon stocks in the commitment period referred to in subparagraph (a) above, shall be used to meet the commitments under subparagraph (a) above of each Party included in Annex I. The greenhouse gas emissions by sources and removals by sinks associated with those activities shall be reported in a transparent and verifiable manner and reviewed.

48. The greenhouse gas emissions by sources and removals by sinks resulting from additional human-induced land use, land-use change and forestry activities may be used to meet the commitments under subparagraph (a) above of each Party included in Annex I, provided that these activities have taken place since 1990.

49. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, decide upon modalities, rules and guidelines related to the issues referred to in subparagraphs (i) and (ii) above, taking into account uncertainties, transparency in reporting, verifiability, the methodological work of the Intergovernmental Panel on Climate Change, the advice provided by the Subsidiary Body for Scientific and Technological Advice and the decisions of the Conference of the Parties.

*Proposal to insert as Annex:*

Annex A
National Schedules of Mitigation Commitments and Actions
[Alphabetical List of National Schedules of Parties]
National Schedule for [Name of Party] [to be filled in as per Article 4] (of Party Submission)

National pathway			
Emissions pathway to 2050			

**Economy-wide nationally appropriate mitigation commitments and actions**

Name/brief description of commitment or action	Baseline/ reference case	Emissions outcomes expected	Unilateral/supported
	e.g. year, period,	XXX	XXX
	BAU, Mt CO <sub>2</sub> e/unit,		
	KW/h/unit, etc		

**Sectoral nationally appropriate mitigation commitments and actions**

Name/brief description of commitment or action	Baseline/ reference case	Emissions outcomes expected	Unilateral/supported
	e.g. year, period,	XXX	XXX
	BAU, Mt CO <sub>2</sub> e/unit,		
	KW/h/unit, etc		

ANNEX B
GREENHOUSE GASES AND SECTORS/SOURCE CATEGORIES
<i>[NOTE: Greenhouse gases and sectors/source categories to be inserted.]</i>

Annex III B

**Enhanced action on mitigation**

**Nationally appropriate mitigation actions by developing countries**

This annex contains the text found in sub-chapter III B of the revised negotiating text (FCCC/AWGLCA/2009/INF.1), grouped into eight clusters of similar concepts by the co-facilitator. This grouping was carried out using the same approach that was used to prepare the non-paper on paragraph 1 (b) (ii) of the Bali Action Plan presented to Parties during the informal meeting of the AWGLCA held in Bonn, Germany, in August 2009.

The headings of the clusters do not represent the subsection headings contained in sub-chapter III B of the revised negotiating text, nor are they suggestions for new headings. They are simply themes around which text is grouped. Furthermore, the presentation of these clusters does not imply any sequencing.

This annex contains a number of cross-references back to the revised negotiating text.

Paragraphs can be traced to their origin by using the explanatory table contained in annex III B to document FCCC/AWGLCA/2009/INF.2/Add.1.

Structural proposals:

- 1) Move paragraphs 111, 112 and 115–118 to chapter III B, subsection 3, on measurement, reporting and verification of support.
- 2) Move paragraph 127 to chapter III B, subsection 5, on institutional arrangements.
- 3) Move the amended version of paragraph 73 providing examples of possible commitments and actions that Parties could register in national schedules to a proposed new subsection on national schedules.
- 4) Move paragraphs 70–73 as options under paragraph 74.
- 5) Move paragraph 74 to a proposed new section on mitigation elements common to all Parties.
- 6) Move all proposals related to finance contained in paragraphs 75–80 to chapter IV A on finance.
- 7) Move all options included in paragraphs 77–80, except paragraph 78, subparagraph 3, to chapter IV A on finance.
- 8) Move paragraph 81 to chapter IV A on finance.
- 9) Move paragraph 82 to a proposed new subsection on low-emission development strategies.
- 10) Move this section to chapter IV on enhanced action on financing, technology and capacity-building.
- 11) Make subparagraph 83 (f) paragraph 83.1.
- 12) Move this section to a proposed stand-alone section on MRV of commitments and actions (of both developed and developing countries).
- 13) Move paragraph 88 to the first section of a proposed new section on common elements for all Parties.

[Cluster A: Introductory material (Principles, Objectives and Nature)]

*[What is the objective of nationally appropriate mitigation actions by developing countries?]*

1. To enhance implementation of Article 4.1 of the Convention, enabled and supported through enhanced implementation of commitments of developed country Parties and other Parties included in Annex II under Articles 4.3, 4.4 and 4.5, in accordance with Article 4.7 of the Convention.

*[What should be the guiding principles for nationally appropriate mitigation actions by developing countries?]*

2. Abide by the principles of the Convention embodied in its Article 3, in particular the right to sustainable development enunciated in its Article 3.4.

3. Recognize that nationally appropriate mitigation actions by developing country Parties are taken in the context of sustainable development.

4. Act in accordance with, and take the necessary steps to ensure the implementation of, Article 4.7 of the Convention, which stipulates that “the extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention related to financial resources and transfer of technology and will take fully into account that economic and social development and poverty eradication are the first and overriding priorities of the developing country Parties” (enhanced support and enabling means result in enhanced actions of developing country Parties and not the other way ‘round).

5. [The extent of mitigation actions undertaken by developing countries will depend on the extent of effective provision of financial and technological support by developed country Parties.]

6. [The extent to which mitigation actions can be undertaken by developing countries will depend on the effective provision of financial, technological and capacity-building support by developed country Parties.]

7. [The [level][extent] of mitigation [effort][action] by developing countries shall be commensurate with the level of support received.]

8. [The level of mitigation effort by developing countries shall be commensurate with the level of financial resources and technology received.]

9. Enhance the implementation of Article 12.4 of the Convention, that developing country Parties may, on a voluntary basis, propose projects for financing, including specific technologies, materials, equipment, techniques or practices that would be needed to implement such projects, along with, if possible, an estimate of all incremental costs, of the reductions of emissions and increments of removals of GHGs (GHG), as well as an estimate of the consequent benefits.

10. Give international recognition that developing country Parties are undertaking mitigation actions domestically based on their own resources.

11. [The NAMAS by developing country Parties [should][shall] be different for different groups of countries, depending on the level of development of their economies [, particularly in the case of LDCs and SIDS,] and on their respective capacities and specific national circumstances [, including limited opportunities that may be available for using alternative energy sources].]

12. [NAMAs may be different for different groups of countries, depending upon their national circumstances.]

13. The NAMAs of developing country Parties shall take into account their national circumstances. Parties' ability to reduce GHG emissions is affected by their access to alternative energy options. To this effect, pursuant to Article 4, paragraph 10 of the Convention, the difficulties faced by developing country Parties in switching from fossil fuels to alternative energy sources shall be quantified and taken into account to reflect their alternative-energy disadvantage.

14. [The NAMAs by developing country Parties [should] evolve over time to reflect changes in national circumstances assessed in accordance with objective criteria of economic development.] [The Conference of the Parties should review the circumstances of each Party periodically.]

15. [Recalling Article 4.1(b) of the Convention and recognizing that the levels of ambition expected of Parties will necessarily evolve over time as their respective national circumstances and respective capabilities change.]

16. [The NAMAs by developing country Parties [shall][should] be formulated consistent with the levels of ambition needed to contribute to meeting the ultimate objective of the Convention.]

*[What is the nature of the nationally appropriate mitigation actions by developing countries?]*

17. Recognize that nationally appropriate mitigation actions for developing country Parties, as defined in the Bali Action Plan, paragraph 1 b (ii), are distinct from the mitigation commitments of developed country Parties under its paragraph 1 b (i), both in magnitude and in legal nature.

18. [The NAMAs by developing country Parties [shall][should] be distinct from the commitments of developed country Parties and should not constitute binding obligations or targets for developing country Parties [, or be used as a basis for differentiating among them].]

19. [The NAMAs by developing country Parties [shall][should] be distinct from the commitments of developed country Parties and other Parties included in Annex I to the Convention and should not constitute binding obligations or targets for developing country Parties, or be used as a basis for differentiating among them.]

20. [The NAMAs by developing country Parties [shall][should] be distinct from the commitments of developed country Parties and should not constitute binding obligations or targets for developing country Parties [, or be used as a basis for differentiating among them.]] [Should][Shall] be different for different groups of countries, depending on the level of development of their economies (, particularly in the case of LDCs and SIDS,) and on their respective capacities and specific national circumstances.

21. NAMAs by developing countries are voluntary and contingent on financial and technical support by developed countries.

*[Cluster B: Definition and Scope]*

*[What constitutes nationally appropriate mitigation actions by developing countries?]*

22. [Developing country Parties contribute to enhanced mitigation by undertaking range of actions including NAMAs in the context of low-carbon/emissions development strategies. These actions should be country-driven [, commensurate with responsibilities and capabilities of each country Party,] [undertaken [on a voluntary basis] [either as international obligation or on a voluntary basis] in the context of sustainable development, with MRVed means of implementation particularly finance and capacity-building, in conformity with prior needs of sustainable development and eradication of poverty, and [determined and formulated at the national], in accordance with all levels of government authorities, [or international] level in accordance with the principle of equity and of common but differentiated responsibilities and respective capabilities.]]

23. [Nationally appropriate mitigation actions by developing countries must result in a substantial deviation from baseline by 2020 in a measurable, verifiable and reportable manner if enabled and supported by appropriate funding and transfer of technology by developed countries.] [Individual mitigation efforts by developing country Parties must be also considered NAMAs, and thus, undertaken in a measurable, reportable and verifiable manner].
24. [Developing country Parties may enhance their mitigation actions through NAMAs in accordance with the principles of common but differentiated responsibilities and respective capabilities. These actions should be in conformity with national development priorities and in the context of sustainable development and poverty eradication. They shall be determined and formulated at the national level.]
25. [Recognizing that many developing country Parties have already taken early and sustained action to reduce their emissions growth, developing country Parties shall continue to contribute to enhanced international mitigation action by pursuing NAMAs, supported and enabled by technology, financing and capacity-building from developed country Parties and other Parties included in Annex II to the Convention. These actions should be country-driven, undertaken on a voluntary basis in the context of sustainable development, in conformity with prior needs of sustainable development and eradication of poverty, and determined and formulated at the national level in accordance with the principles of common but differentiated responsibilities and respective capabilities. Recognition should also be given to the unilateral NAMAs that continue to be taken without being supported and enabled by technology, financing and capacity-building from developed country Parties.]
26. [Developing country Parties, notwithstanding paragraph \_\_ above, shall undertake nationally appropriate mitigation actions to reduce GHG emissions.]
27. [Mitigation actions by developing countries constitute a meaningful contribution to enhanced mitigation. Such actions are voluntary, nationally appropriate, supported and enabled by developed countries through the provision of technology, finance and capacity-building. NAMAs, which may include projects and programmes, shall be formulated through a country-driven process, and in accordance with the principles of common but differentiated responsibilities and respective capabilities. The aim of these actions is to reduce or avoid emissions, taking into full account the legitimate priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty.]

*[What is the scope of nationally appropriate mitigation actions by developing countries?]*

28. Nationally appropriate mitigation actions are all actions to mitigate climate change consistent with national circumstances, and that are commensurate with Parties' responsibilities and capabilities, as reflected in Parties' national programmes to mitigate climate change required by Article 4.1(b) of the Convention.
29. [Only those actions that are supported by developed country Parties can be characterized as NAMAs.]
30. [[A subset of] [NAMAs by developing country Parties [shall be][are actions] [Depending on the nature of NAMAs by developing country Parties, they may be] supported and enabled by technology, financing and capacity-building in accordance with Articles 4.3 and 4.7 of the Convention and undertaken in a measurable, reportable and verifiable manner.] [Supported and enabled NAMAs [and][as well as] the support for NAMAs [have been already progressed based on unilateral efforts as well as being] [shall] be undertaken in a measurable, reportable and verifiable manner. [The extent of mitigation actions undertaken by developing countries will depend on [negative cost measures and] the effective provision of financial, [and] technological and capacity-building support by developed country Parties.]]



[NAMAs by developing countries are contingent on financial and technical support by developed countries].]

31. [NAMAs can [be any actions defined by developing country Parties,] take suitable forms according to the responsibilities and capabilities of developing country Parties,] including any individual actions and [projects][large-scale mitigation programmes, beyond projects] according to national circumstances in the context of Articles 4.1(b), Article 4.3 and 12.4 of the Convention; that lead to measurable, reportable and verifiable emission reductions or limitations [and they should be based on ‘a no-lose target’ concept] [and should not generate offsets for developed country Parties][and shall be quantified to the extent possible].

32. [NAMAs may comprise individual mitigation actions, sets of actions or programmes [, including sustainable development policies and measures, [REDD], [programmatic CDM], [[no-lose sectoral crediting baselines] and others].]

33. NAMAs may comprise individual mitigation actions, sets of actions or programmes, including sustainable development policies and measures, REDD, programmatic CDM, no-lose sectoral crediting baselines and others, that are enabled by measurable, reportable and verifiable financial, technological and capacity-building support.

34. [NAMAs can be any actions defined by developing country Parties, including any individual actions and appropriate mitigation programmes in the context of Articles 4.1(b) and 12.4 of the Convention; and they should be based on a ‘no-lose target’ concept.]

35. [NAMAs can be any actions defined by developing country Parties, including any individual actions and [projects][large-scale mitigation programmes, beyond projects, and should not generate offsets for developed country Parties].]

36. [NAMAs must contribute to overall global GHG emission reductions in a measurable way (tons of emissions reduced) so that progress in achieving global emission reductions can be assessed and effort compared, and may include measurable and quantifiable emission reductions achieved through:

- (a) Renewable energy targets
- (b) Energy efficiency targets
- (c) ...etc.]

37. The NAMAs by developing country Parties [shall] [should] be in the form of sectoral and economy-wide GHG emission intensity targets (GHG emissions per GDP), with a view to substantially limiting the growth of GHG emissions in those developing countries that contribute substantially to global emissions of GHGs.

38. The NAMAs by developing country Parties [[shall][could include] actions] [be] [in the form of sectoral and economy-wide GHG emission intensity targets, with a view to substantially limiting the growth of GHG emissions in those developing countries that contribute substantially to global emissions of GHGs] [and have appropriate response capabilities].

39. Cooperative sectoral approaches and sector specific actions can be designed by developing countries within their NAMAs in order to receive financial support and technology transfer to achieve the mitigation potential identified in the selected sectors. These actions would not be eligible for crediting or participation in any market mechanism.

40. NAMAs by developing country Parties may comprise the following:
- (a) Actions enabled and supported by finance, technology and capacity-building from developed country Parties and other developed Parties included in Annex II to the Convention;
  - (b) Actions, not including those in subparagraph (a) above, that are undertaken unilaterally by developing country Parties through public funding or other means ("unilateral NAMAs");
  - (c) Actions pursued with the intention of generating credits to participate in carbon market(s).
41. [Developing country Parties in undertaking nationally appropriate mitigation actions may elect to take such actions under the following tiers:
- (a) Tier One: actions that are financed domestically, either nationally or subnationally;
  - (b) Tier Two: actions that are financed by international financial and/or technical support, either through bilateral support, support from the Multilateral Fund on Climate Change, or other international financial means;
  - (c) Tier Three: actions that are undertaken over and above those identified in tier one and tier two actions are based on an emission reduction target and may be eligible for trading of units.]
42. Nationally appropriate mitigation actions as described in paragraph 41 above<sup>1</sup> may be undertaken at the national, sectoral or project level.
43. [Parties that undertake tier three actions may be eligible to undertake international emissions trading. Eligibility for participation in international emissions trading shall be subject to relevant rules, modalities and guidelines developed by the COP (or Conference of Parties serving as the assembly of Parties.)]
44. [Any such trading shall be supplemental to domestic actions for the purposes of meeting commitments or actions and supplemental to tier one and tier two NAMAS.]
45. [Units generated through trading under this Article may be inter-tradable with units generated by the Kyoto Protocol, subject to rules, modalities and guidelines developed jointly by the COP (or Conference of Parties serving as the assembly of Parties to this Protocol) and the Conference of Parties serving as the meeting of Parties to the Kyoto Protocol.]
46. [Actions undertaken at the national or sectoral level by means of tier three<sup>2</sup> may be eligible for emissions trading, subject to appropriate measurable, reportable and verifiable requirements developed according to Article 4, paragraph 3.]
47. [NAMAs may include [but not limited to][inter alia]:
- (a) Development of national action plan]
  - (b) [Sustainable development policies and measures;]

<sup>1</sup> Cross-references contained in this annex refer to the paragraph numbering of this annex only.

<sup>2</sup> Actions that are undertaken over and above those identified in tier one and tier two actions are based on an emission reduction target and may be eligible for trading of units.

- (c) [[Low-emission][Low carbon] development strategies and plans;]
  - (d) Renewable energy strategies and plans;
  - (e) [Programmatic CDM], technology deployment programmes [or standards], energy efficiency programmes [and energy pricing measures] standards of financial schemes, including renewable energy and energy efficiency;
  - (f) [Cap-and-trade schemes and carbon taxes] and the use of new and existing [flexible][carbon-market] mechanisms, including project- and program-based CDM;
  - (g) [[Economy-wide and] [Sectoral intensity targets], national sector-based mitigation actions and standards, [and no-lose sectoral crediting baselines];]
  - (h) [REDD-plus<sup>3</sup> activities and other mitigation actions implemented in [different][related] areas and sectors[, including agriculture];]
  - (i) Mitigation actions at the subnational or local level, in particular in cities and rural communities;
  - (j) Adaptation actions that have mitigation benefits;
  - (k) Mitigation actions that provide a win-win situation and that are clearly supported by measurable, reportable and verifiable means of implementation;
  - (l) Renewable energy policies and measures, including financial schemes;
  - (m) Bilateral actions or strategies implemented by developing country Parties;
  - (n) Renewable energy policies and measures, including financial schemes;
  - (o) Bilateral actions or strategies implemented by developing country Parties.
48. [NAMAs may include:
- (a) Sustainable development policies and measures;
  - (b) Low-emission development strategies and plans;
  - (c) The CDM, programmatic CDM, technology deployment programmes or standards, energy efficiency programmes and energy pricing measures;
  - (d) Cap-and-trade schemes and carbon taxes;
  - (e) Sectoral targets, national sector-based mitigation actions and standards, and no-lose sectoral crediting baselines.]
49. [Nationally appropriate mitigation actions shall incorporate the development and diffusion of low greenhouse emitting technologies, particularly renewable energy and energy efficiency technologies.]
50. [Nationally appropriate mitigation actions shall not include technologies that have adverse impacts on the environment, including, inter alia, nuclear power and large-scale hydro-electric power.]

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<sup>3</sup> In this document, actions under paragraph 1 (b) (iii) of the Bali Action Plan (issues related to policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries) are referred to collectively as “REDD-plus.”

[Cluster C: Support, enabling activities and institutional arrangements]

*[What support should be provided to nationally appropriate mitigation actions by developing countries?]*

51. [NAMAs by developing country Parties shall be supported and enabled by technology, financing and capacity-building in accordance with Articles 4.3, 4.5 and 4.7 of the Convention. Annex I Parties shall provide new and additional financial resources and technology, over and above that provided to enable developing countries to implement their commitments under Article 4.1 of the Convention.]

52. [International financial and technology support for NAMAs will come from a range of sources mobilized by the financial and technology mechanism(s). A set of criteria will be developed to ensure that the funds are spread evenly, ensuring equity, a fair distribution of benefits and an even spread across all economic sectors.]

53. [Incentives for developing country Parties can be provided by linking supporting measures (in technology and finance) and capacity building with efforts in measurement, [and] reporting [and verification].]

54. [NAMAs implemented by developing country Parties, undertaken as part of their low-carbon/emission development strategies, that are not financed by those Parties through autonomous action and require assistance in the form of financing, technology or capacity-building for implementation shall be supported by technology, financing and capacity-building in accordance with Articles 4.3, 4.7 and 11.5 of the Convention. Financial flows for mitigation will be sourced and governed in a transparent and balanced manner in line with [chapter 4][paragraphs 173 and 174] (of FCCC/AWGLCA/2009/INF.1) [text][agreement].]

55. [Implementation of actions shall be enhanced through the provision of financial resources technology transfer and support for building institutional capacity in developing countries.]

56. [Implementation of actions shall be enhanced through support for building institutional capacity in developing countries.]

57. [NAMAs shall be supported and enabled by financing, technology and capacity-building where sought by developing countries.]

58. [Financial and technological support shall enable developing country Parties to implement their NAMAs.]

59. [NAMAs by developing countries shall be supported on the basis of:

- (a) The agreed full cost for enabling activities; and
- (b) The agreed full incremental cost for implementation of NAMAs.]

60. [NAMAs for the agreed allocation deviation from business as usual which is undertaken by developing country Parties shall be supported on the basis of the full incremental cost.]

61. [Actions including NAMAs by developing countries [should][shall] be supported and enabled [by developed country Parties] [on the basis of [agreed] full [incremental] costs][on the basis of agreed full incremental cost][on the basis of agreed full cost and agreed full incremental cost] and total cost as appropriate.]

62. [Actions undertaken under tier two<sup>4</sup> shall be supported by financial assistance for the Mitigation Window of the Multilateral Fund on Climate Change and through other multilateral and bilateral funding sources, as appropriate.]

*[What institutional arrangements will be needed to support the implementation of nationally appropriate mitigation actions by developing countries?]*

63. Channel means of enabling implementation of mitigation actions by developing country Parties through the mechanisms on financing, technology and capacity-building as may be established under the Convention and the authority of the Conference of the Parties.

64. To support the implementation of the mitigation actions, the following new institutional arrangements should be established:

- (a) An Executive Body on Finance and Technology for Mitigation (EBFTM), accountable to the COP, shall be established;
- (b) The EBFTM will govern a Mitigation Fund to be created under the Convention;
- (c) The EBFTM will be supported by six technical panels on:
  - (i) Research and development;
  - (ii) Capacity-building;
  - (iii) Transfer of technologies for mitigation;
  - (iv) REDD plus;
  - (v) Market mechanisms;
  - (vi) Measurement, reporting and verification.

65. NAMAs should be submitted by developing countries to the EBFTM for support.

66. The Financial and Technology Mechanism on Mitigation shall aim to achieve:

- (a) Accessibility, affordability, appropriateness and adaptability of technologies required by developing countries for enhanced action on mitigation;
- (b) Provision of full costs and full incremental costs, as per Article 4.3 of the Convention;
- (c) Adequacy and predictability of funds for technology transfer;
- (d) Removal of barriers to technology development and transfer.

67. The proposed Financial and Technology Mechanism on Mitigation shall address all aspects of cooperation on technology research, development, diffusion and transfer in accordance with Articles 4.3, 4.5 and other relevant Articles of the Convention, in order to enable mitigation under the relevant paragraphs of decision 1/CP.13.

68. The proposed Financial and Technology Mechanism on Mitigation shall be governed by the following principles and guiding criteria:

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<sup>4</sup> Actions that are financed by international financial and/or technical support, either through bilateral support, support from the Multilateral Fund on Climate Change, or other international financial means.

- (a) Be underpinned by the principles of equity and common but differentiated responsibilities;
- (b) Operate under the authority and guidance of, and be fully accountable to, the COP;
- (c) Have an equitable and geographically balanced representation of all Parties within a transparent and efficient system of governance (Article 11.2);
- (d) Enable direct access to funding by the recipients and ensure the provision of new and additional, adequate and predictable financing resources for technology transfer;
- (e) Ensure recipient country involvement during the stages of identification, definition and implementation, rendering it truly demand driven;
- (f) Support the development and enhancement of endogenous capacities and technologies of developing country Parties.

69. The proposed Financial and Technology Mechanism on Mitigation is meant to ensure the full, effective and sustained implementation of the Convention, in relation to the implementation of commitments for the provision of financial resources, as mandated in Articles 4.1, 4.3, 4.4, 4.5 and 4.9 of the Convention and in accordance with Article 11.

70. [Procedures for the allocation of funds for tier two actions shall be developed by the Board of the Multilateral Fund on Climate Change and approved by the Conference of Parties serving as the assembly of the Parties.]

71. Developing country Parties may establish national coordinating bodies to build institutional capacity and facilitate coordination of the submission of proposals for NAMAs, together with the details of the support required for the implementation of the proposals for NAMAs. The latter should include an estimate of the full incremental costs that are to be met by the financial mechanism under the Convention.

72. [National coordinating bodies] [shall] [should] be established or be appointed to build or strengthen institutional capacity in developing countries, and to provide support and facilitate coordination for [development and implementation of low-carbon strategies and national inventories][the submission of NAMAs to the international register to register and facilitate the implementation of NAMAs and support for them (as referred to in paras 77–82 of FCCC/AWGLCA/2009/INF.1).] [The bodies should also facilitate coordination of mitigation actions undertaken without assistance from developed countries, to ensure international recognition of all mitigation action taken.]

*[What enabling activities relating to nationally appropriate mitigation actions will be supported?]*

73. All developing countries are encouraged to elaborate their NAMAs and, for this purpose, financial and technical support should be available upon request through the financing mechanism to be created under the Convention.

74. The elaboration of low-carbon/emission development strategies and plans for the least developed country Parties should be supported financially and technically.

75. Support shall be provided for the preparation of low-GHG emission development strategies.

76. Funding for national communications shall be adjusted accordingly to respond to the added reporting burden.

77. The agreed full costs of enabling activities undertaken by the national coordinating bodies shall be met by developed country Parties. The administration costs of national coordinating bodies shall be covered through international financial resources made available for this purpose. A separate pool of funding to finance national coordinating bodies through a direct line item in the secretariat's budget shall be established. Such support shall not be subject to measurement, reporting and verification.

78. [[Sufficient][Adequate and accessible][enhanced][agreed full costs][Adequate technical,][sustained] financial [support] and capacity-building shall be provided to developing country Parties to enable them to develop and maintain capacity to prepare national GHG emissions inventories and national communications.]

79. For supported NAMAs by developing countries, developed country Parties including those included in Annex II to the Convention shall provide new and additional financial resources to meet the agreed full cost of verification undertaken by the developing countries.

80. [NAMAs by developing countries [should][shall] be supported [on the basis of [agreed] full and [incremental] costs] on a full cost basis and shall be undertaken on a voluntary basis. The support [should] cover various activities in mitigation, including:]

- (a) Activities at different stages of a NAMA, including design preparedness, planning and implementation and related capacity-building;
- (b) [Creating and sustaining enabling environments for mitigation actions in developing countries, [including integrated [territorial] plans at national, regional and local level;][including support for climate integrated territorial plans at local, national and regional level, as appropriate]
- (c) [Identifying and removing barriers to unilateral actions;]
- (d) Planning and implementation of mitigation activities that have adaptation potentials;
- (e) [Undertaking measurement, reporting and verification of actions;]
- (f) [Technology needs assessments (TNAs);]
- (g) [Elaboration of low-emission development strategies and plans for [all developing countries][the LDCs] [should][shall] be supported [on the basis of agreed full incremental cost.]

81. Modalities for measurement, reporting and verification in developing countries require support.

82. Modalities for measurement, reporting and verification in developing countries require support.

*[Cluster D: Plans and strategies]*

83. Each developing country Party shall, in accordance with Article 4.1 of the Convention, elaborate a low-carbon/emissions development strategy. Low-carbon/emissions development strategies shall contain:

- (a) The description of a long-term strategy for the low-carbon/emissions development of the developing country in the context of its broader sustainable development strategies, including an emission pathway, this means an emission projection planned to be achieved with the implementation of the strategy;
- (b) The description of all NAMAs, i.e. all mitigation actions that the developing country intends to undertake on its territory in the short- and medium term as part of this long-term strategy. For each NAMA, the developing country should:

- (i) Indicate autonomous action that is to be financed and implemented by the country itself;
- (ii) Identify barriers to the implementation of autonomous action, including identifying technology needs and barriers to technology deployment and diffusion, whose removal needs support;
- (iii) Indicate action that, due to the incremental costs, requires assistance, in the form of financing, technology or capacity-building for implementation;
- (iv) Specify, when relevant, what type of support in terms of finance, capacity-building and technology it considers most appropriate to enable the implementation of the NAMA;
- (v) Specify, when relevant, if the use of a [flexible][carbon market] mechanism is proposed, and the associated caps and thresholds;
- (vi) Specify the outcomes of the NAMA that are foreseen in terms of emission reductions for several time horizons, e.g. 2020, 2030 and 2050 and provide information on how these emission reductions were estimated.
- (vii) (Other elements)

84. Developing country Parties shall commit to integrating low-carbon/emission development strategies covering all key emitting sectors into national and sectoral strategies, and have them in place as soon as possible and no later than 2012.

85. The meeting of the Parties to this Agreement shall [at its first session] elaborate further guidelines and modalities for the elaboration and reporting of low-carbon/emission development strategies under this Article.

86. [Non-Annex I Parties shall adopt voluntary nationally appropriate mitigation actions in the context of sustainable development goals and objectives, which shall aim to address anthropogenic emissions of GHGs and protect and enhance GHG sinks and reservoirs in a measurable way and which, supported and enabled by technology, financing and capacity-building, shall contribute to achievement of the ultimate goal of the Convention by reducing emissions significantly from baseline projections.]

87. [In order to promote progress to this end, non-Annex I Parties, taking into account Article 4, paragraph 1, of the Convention and their specific national and regional development priorities, objectives and circumstances, shall:

- (a) Formulate national low-GHG emission development strategies containing nationally appropriate actions to mitigate climate change by addressing anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol, which in the aggregate shall aim to achieve a significant deviation from current baseline emissions by 2020 and by 2050, supported and enabled by technology, financing and capacity-building;
- (b) Communicate these strategies to the secretariat by [date] together with the following information:
  - (i) A description of steps taken or envisaged by the Party to implement its low-carbon development programme;



- (ii) A detailed description of the nationally appropriate mitigation actions that it has adopted or undertakes to adopt to implement its low-carbon development programme;
- (iii) An estimate of the effects that these nationally appropriate mitigation actions will have on anthropogenic emissions by its sources and removals by its sinks during the timeframes referenced in paragraph \_\_ above.]

88. [The NAMAs by developing country Parties, in further implementation of Article 4.1 of the Convention, shall be elaborated in the context of national low-emission development strategies to be developed by [all] developing country Parties consistent with their capacities and in the context of their broader sustainable development strategies. These low-emission development strategies]

- (a) Shall include an emission pathway (emission projection planned to be achieved with the implementation of the strategy). [The strategies should be put in place no later than 2012 and cover all key emitting sectors.]
- (b) Shall, for developing country Parties whose national circumstances reflect greater responsibility or capabilities, be formulated and submitted as low-emission strategies for long-term net emission reductions by 2050, consistent with the levels of ambition needed to contribute to meeting the ultimate objective of the Convention. [In this context, these countries shall implement NAMAs in the 2020/(...) time frame that are quantified (e.g. reduction from business as usual). [These countries shall indicate dates by when they will commit to the types of action undertaken by developed country Parties<sup>5</sup>.] [Actions by developing countries will be enhanced with support from developed countries];

89. [With respect to developing country Parties whose national circumstances reflect greater responsibility or capability;

- (a) For each such Party, Appendix 1 (*found in Addition 2 under proposals for additional sections/subsections at the beginning of chapter III of FCCC/AWGLCA/2009/INF.1*) includes nationally appropriate mitigation actions in the 2020/[ ] timeframe that are quantified (e.g. reduction from business as usual) and are consistent with the levels of ambition needed to contribute to meeting the objective of the Convention;
- (b) Each such Party shall formulate and submit a low-carbon strategy for long-term net emissions reductions by 2050, consistent with the levels of ambition needed to contribute to meeting the objective of the Convention;
- (c) Appendix x shall include date(s) by which each Party will commit to the type of action referred to in paragraph 1(a) (*refer to paragraph 62, Alternative to paragraph 62 of FCCC/AWGLCA/2009/INF.1*);
- (d) Other developing country Parties should implement nationally appropriate mitigation actions and develop low-carbon strategies, consistent with their capacity.]

90. The NAMAs by developing country Parties, in addition [, each developing country Party [should][shall] develop a voluntary national action plan, including policies and measures for mitigation, which [should] include quantified elements to the extent possible.]

91. The NAMAs by developing country Parties, in addition [, each developing country Party [should][shall] develop a voluntary national action plan, including policies and measures for mitigation, which [should] include quantified elements to the extent possible.]

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<sup>5</sup> As described in paragraph 62 of FCCC/AWGLCA/2009/INF.1.

92. As part of the nationally appropriate mitigation actions described in Annex C, each Party included in Annex C shall develop and submit a national action plan, including policies and measures for mitigation, which shall include quantified elements to the extent possible.

93. The Parties included in Annex C that have substantial contribution to the global emissions of GHGs and have appropriate response capabilities shall achieve their respective GHG emission intensity targets as described in Annex C in the commitment period from 2013 to 20XX, with a view to limiting substantially their GHG emission growth.

Annex C

Party	Nationally appropriate mitigation actions to be taken pursuant to Article 3, paragraph 2 (actions by developing country Parties)
A	To develop and submit national action plan
B*	(1) To develop and submit national action plan (2) To achieve targets as described below: (a) Economy-wide GHG emissions or energy consumption per GDP: xx tonnes-CO <sub>2</sub> e/US\$ or millions tons of oil equivalent/US\$ (b) GHG emissions per unit and other targets in major sectors (i) Iron and Steel: xx kg-CO <sub>2</sub> e/ton-crude steel (distinguished by major steel-making methods) (ii) Cement: xx kg-CO <sub>2</sub> e/ton-cement or MJ/t-clinker (iii) Aluminum : xx kg-CO <sub>2</sub> e/ton-primary aluminum (iv) Power generation: Thermal efficiency of Coal fired powered plant (per cent)/Share of total introduction volume of non-carbon energy (per cent or kw) (v) Other sectors
C	To develop and submit national action plan
...	...

Note: Parties marked with an asterisk (\*) are the Parties that have substantial contribution to the global emissions of GHGs and have appropriate response capabilities.

*[Cluster E: Mechanism(s) to register and facilitate implementation of NAMAs and corresponding support]*

*[What is the mechanism?]*

94. A NAMA register shall be established [as a mechanism][as part of the Financial Mechanisms] to enhance the implementation of the relevant provisions of Articles 4.1, 4.3, 4.5, 4.6, 4.8 and 12.4 of the Convention by facilitating the identification, mobilization [and matching] of support required to implement NAMAs by developing country Parties and enable international recognition and communication of such actions.

95. [A registry for NAMAs by developing country Parties shall be established with the aims of recognizing their actions as part of the global effort to combat climate change and providing a platform for matching those actions, if needed, with measurable, reportable and verifiable support by developed country Parties and other developed Parties included in Annex II to the Convention.]

96. A registry for NAMAs by developing country Parties shall be established with the aims of recognizing the actions as part of the global effort to combat climate change and providing a platform for

[matching] those actions [, if needed, with measurable, reportable and verifiable support by developed country Parties.]

97. [A support and [accreditation] mechanism shall be established with the functions of:
- (a) Registering and pooling all pledges for voluntary mitigation actions by developing countries, [and all pledges for financial support and technology transfer by developed countries;]
  - (b) [Providing a platform for matching NAMAs with financial and technology support and with the provision of emission reduction credits for those actions;]  
*Alternative to subparagraph (b)* [Establish a link with the financial and technology mechanism designed under the Convention;]
  - (c) Providing for measurement, reporting and verification of both actions and the corresponding support;
  - (d) Recognizing NAMAs as part of the global effort to combat climate change.]
98. [A coordinating mechanism shall be established with the functions of:
- (a) Providing a technical assessment of the low-emission development strategies of developing countries and the NAMAs contained therein and of the corresponding needs for support identified. It shall assess, in particular, the contribution of a proposed emission pathway to a substantial deviation from business as usual emission projections;
  - (b) Matching action to support, in such a way as to maximize cost-efficiency and to strengthen financing for NAMAs, taking into account the capabilities of each country;
  - (c) Validating matched action and support.]
99. [A coordinating mechanism is hereby established. The purpose of the coordinating mechanism shall be inter alia, to facilitate:
- (a) Provide technical assessment of propositions of:
    - (i) The low-carbon/emission development strategies, in particular in terms of contribution of the proposed emission pathway to the substantial deviation from business as usual expected from developing countries as a group by 2020;
    - (ii) The proposed NAMAs and of the corresponding needs for support identified.
  - (b) Matching of action to support, in such a way as to maximise the cost-efficiency and strengthen financing for actions (i.e. so as to maximize the emission reductions achieved with regard to the support provided);
  - (c) Validation of matched action and support.]
100. [[The mechanism(s) for [registering and] facilitating implementation of NAMAs in the context of financial, technology and capacity-building support [should][shall]:]
- (a) [Serve as a functional “window” to mechanism(s) for finance and technology under the Convention;]

- (b) [Allow for confirmation that specific support has been channelled to a specific action. Once this channelling has been confirmed, both support and action [should] become effective within the registry simultaneously;]
- (c) [Not replicate CDM procedures.]

101. A mechanism to register and facilitate the implementation of NAMAs and support for them shall form part of the Financing Mechanism established under the Convention.

*[What is to be registered?]*

102. [Mitigation actions receiving support shall be reported in the registry.]

103. [All developing countries shall be provided with financial and technological support to undertake their actions, and such actions, once supported, may be registered so as to gain international recognition for their contribution to mitigating climate change.]

104. [Developing country Parties will register only those NAMAs for which it wishes to secure international financial and technological support.]

105. [Actions by developing country Parties that [are qualified as NAMAs and] can be registered [comprise][include]:

- (a) Actions of three types: (1) actions that are undertaken by developing country Parties and are not enabled or supported by other Parties [“unilateral NAMAs”]; (2) actions that are supported by a fund and financed by developed country Parties; [and (3) actions that are undertaken to acquire carbon credits.]]
- (b) Only actions that [require support][are supported][and enabled by technology, financing, and capacity-building in MRV manner] by developed country Parties. [There will be a mechanism to register and facilitate implementation of nationally appropriate mitigation actions and corresponding measurable, reportable and verifiable support. Actions are conditional on support.]

106. [NAMAs eligible for registration may include:

- (a) Actions that are supported by developing country Parties;
- (b) Actions for which support is sought;
- (c) Unilateral actions that are undertaken by developing country Parties that do not require support but for which recognition is sought.]

107. [Actions by developing country Parties that qualify as NAMAs and can be registered comprise actions of three types: (1) actions that are undertaken by developing country Parties and are not enabled or supported by other Parties (i.e unilateral NAMAs); (2) actions that are supported by developed country Parties and other developed Parties included in Annex II to the Convention; and (3) actions that are undertaken to acquire carbon credits, such as a listing of projects under the CDM, and other crediting programmes that could be set up in the future. These would be subject to international verification consistent with the guidelines for the CDM.]

108. [Developing country Parties [shall] be invited to register their NAMAs in the registry and implement them so that their actions can be recognized as climate actions at the international level and supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner.]

109. [NAMAs and corresponding support that have been approved by the coordinating mechanism shall be inscribed in a register, with a view to recognizing actions undertaken by developing countries with strong measurement, reporting and verification of both national action and support.]
110. [NAMAs and corresponding support that are validated by the coordinating mechanism as part of a low-carbon/emission development strategy shall be inscribed into a register. The register shall contain:
- (a) Actions taken autonomously,
  - (b) Actions requiring support,
  - (c) Actions to be supported by the carbon market.]
111. [For each validated nationally appropriate mitigation action and its corresponding support, the register shall in particular contain the following information: (to be determined)]
112. [Developing countries may voluntarily choose to register actions which are undertaken with their own resources but for which they are not seeking multi-lateral support. Such actions may be registered for recognition purposes only.]
113. [Developing country Parties [should][could][may on voluntary basis][may] [register][submit] their [ongoing and planned][proposed] NAMAs, in the context of their low-carbon/emission development strategies to the coordinating mechanism, in order to gain international recognition of these actions [and to seek financial, [and] technological and capacity-building support to undertake [further][the proposed] actions.]] Developing country Parties should elaborate further actions for which they seek financial and technological support in their Low Emission Development Strategies.
114. [Developing countries may register their NAMAs on a voluntary basis as elaborated in paragraph 75.1 (of FCCC/AWGLCA/2009/INF.1).]
115. [Developing countries may register their NAMAs with the financial and technology mechanism(s) of the Convention on a voluntary basis.]
116. [Developing country Parties, except LDCs, [shall] [also be invited] to register in the registry and implement [, on a voluntary basis,] their unilateral NAMAs taken without technology, financing and capacity-building support, in accordance with national regulations [, which can be measured, reported and verified in accordance with guidance provided by the COP]].
117. [Developing country Parties [shall] be invited to register their NAMAs in the registry and implement them so that their actions can be recognized at the international level and supported and enabled by technology, financing and capacity-building, in a measurable, reportable and verifiable manner. Developing country Parties [shall] also be invited to register in the registry and implement, on a voluntary basis, their unilateral NAMAs taken without technology, financing and capacity-building support, which can be measured, reported and verified according to guidelines agreed by the COP.]
118. [Developing country Parties may nominate tier one<sup>6</sup>, tier two<sup>7</sup> and or tier three<sup>8</sup> nationally appropriate mitigation actions to be incorporated in an International Register maintained by the secretariat.]
119. NAMAs listed for support in the registry could cover various mitigation activities.

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<sup>6</sup> Actions that are financed domestically, either nationally or subnationally.

<sup>7</sup> Actions that are financed by international financial and/or technical support, either through bilateral support, support from the Multilateral Fund on Climate Change, or other international financial means.

<sup>8</sup> Actions that are undertaken over and above those identified in tier one and tier two actions are based on an emission reduction target and may be eligible for trading of units.

120. [The function of the mechanism(s) [shall][should] include registering:
- (a) The expected outcome of each NAMA in terms of its sustainable development benefits and co-benefits and the GHG emission reductions
  - (b) Nationally appropriate mitigation actions by developing countries
  - (c) The mitigation result which may be emission baselines specific to projects and programmes;
  - (d) An estimate of the full incremental cost of each NAMA, including for technology transfer and capacity-building;
  - (e) Information on the sustainable development benefits.]
121. Developed countries Parties should register their financial, technological and capacity-building support in order to fulfil their obligation under the Convention.
122. [[Support provided through the registry should not be channeled [solely] to actions that achieve direct emission reductions.] Support [should] be differentiated between different kinds of actions.]
123. [Support by developed countries that can be registered comprise only support that is delivered through a technology and financing mechanism under the Convention.]
124. [The function of the mechanism(s) [shall][should] include registering:
- (a) [The expected outcome of each NAMA in terms of its sustainable development benefits and co-benefits and mitigation benefit that including direct and indirect benefits the GHG emission [reductions]][limitation]]
    - (i) [In relation to the emission baselines or business as usual path [, including at a national or sectoral level]][for several time horizons, for example 2020, 2030 and 2050];]
    - (ii) [Directly, not based on the definition of a baseline or other intermediate outcomes which can be used to show the mitigation benefit of NAMAs when appropriate baseline methodologies are not available;]
  - (b) Mitigation actions receiving support shall be reported in the registry;
  - (c) Developed countries shall report on the measurement of support in their national communications under Article 12.3 and support shall be updated in the registry on an annual basis;
  - (d) An estimate of the full [incremental cost] of each NAMA, including for technology transfer and capacity-building;
  - (e) Information relating to implementation of each NAMA, including information on support received and the time frame for implementation;
  - (f) [Any proposed use of a carbon market mechanism, and the associated caps and thresholds.][Support by developed countries in terms of technology, finance and capacity-building].
125. [Information provided in connection with NAMA registration shall include:
- (a) The expected outcome in terms of quantifiable emission reductions in tons of CO<sub>2</sub>-eq;

- (b) The contribution of the reductions to the country's achievement of significant deviation from a 'business as usual' emission trajectory in accordance with the country's low-emission development programme;
- (c) A timeframe for implementation;
- (d) The estimated cost.]

*[How does the mechanism function?]*

126. [[[Matching action to] support shall be undertaken in such a way as to maximize cost-efficiency and strengthen [financing][the provision of financing, technology and capacity-building] for actions. [The establishment of mechanisms for [matching] support and actions [should][shall] take into account the need to ensure environmental integrity of NAMAs and aim at achieving cost-efficient emission reductions.]] The support [should][shall] be based on the needs identified by developing country Parties to enhance implementation of their NAMAs.]

127. [The provision of financial resources and technological transfer for matching action to support shall be undertaken in such a way as to maximize cost-efficiency and strengthen financing for actions. To this end, the financial and technology transfer mechanisms under the convention will play a lead role. Taking into account the need to ensure environmental integrity of NAMAs and aim at achieving cost-efficient emission reductions. The support [should] be based on the needs identified by developing country Parties to enhance implementation of their NAMAs.]

128. [The secretariat shall open and maintain the register of NAMAs. The register shall initially contain a list of: indicative [proposed] mitigation being implemented or being proposed actions [; information related to the assumptions and [methodology][activities] underpinning the proposed actions; the emissions that would be avoided as a result of the actions (relative to a GHG emission baseline)]; the sustainable development benefits identified by the developing country;] and the support that would be required for the proposed methodology and actions. [This information shall be assessed by a technical panel composed of representatives of Parties mainly from developing countries, including representatives from LDCs established under the Convention. Once the technical panel has reported to the Party that the support and action [and support] have been established in line with agreed approach, additional financial support shall be given to that particular Party's an incentive for the continuation and sustainability of such [good practice,]. [A][a] request to the financial and technology mechanism(s) of the Convention, which shall be responsible for matching support to actions, shall be triggered in this regard.] [Support should match actions to be undertaken during the whole process].]

129. [The register shall be updated [annually] to reflect the status of implementation of action and its support. Following the first measurable, reportable and verifiable report, the NAMA shall be considered registered (and no longer indicative).]

130. [Reporting on the status of implementation to the registry shall be annual with an update based on measured outcomes every two years, alternating with reporting on GHG inventories.]

131. [The modalities for the operation of the International Register shall be developed by the Conference of the Parties serving as the assembly of Parties.]

132. The Meeting of the Parties under this Agreement shall, at its first session, elaborate further modalities and procedures for the coordinating mechanism and the register.

133. Governance of the coordinating mechanism, including possible supporting technical bodies: (text to be developed)]

134. [Once a NAMA is registered and approved by a technical panel, the provision of financial resources and technology transfer shall become automatic.]

135. [Once a NAMA is registered and approved by a technical panel, the provision of financial resources and technology transfer shall become automatic.]

136. [The support and [accreditation] mechanism shall facilitate the implementation of NAMAs through:

- (a) “The support path”, involving direct financial and technological support by developed countries, channelled through the financial and technology mechanism(s) of the Convention;
- (b) [“The accreditation path”, involving provision of emission reduction credits for NAMAs.]]

137. [Developing countries may choose one or [both] of the above “paths” to implement NAMAs.]

138. [Developing country Parties shall decide when the level of support from [both] sources mentioned in paragraph 136 above is sufficient for the implementation of a proposed NAMA. They retain the right to delay implementation of the proposed NAMA if they consider the level of support insufficient.]

139. [A mechanism or mechanisms to [register and facilitate the implementation of NAMAs][review low-carbon development strategies] and support for them (as referred to in paras. 77–82 of FCCC/AWGLCA/2009/INF.1) [should][shall] be established at the UNFCCC secretariat under the authority of the COP, supported by:]

- (a) [[A technical panel] established under the Convention to assess both the assumptions and methodology underpinning proposed [NAMAs][LCSs] [and the support required for the actions];]
- (b) [[A new body established under the COP] that will manage the measurement, reporting and verification of NAMAs and their corresponding technology, finance, and capacity-building support.]

140. [The mechanism shall be established at the secretariat under the authority of the COP and shall be supported by:

- (a) A technical panel established under the Convention to assess both the assumptions and methodology underpinning NAMAs and the support that those actions require;
- (b) A new body established under the COP that will conduct the verification of NAMAs and their corresponding technology, finance and capacity-building support.]

[Cluster F: Measurement, reporting and verification]

*[What should be measured, reported and verified?]*

141. NAMAs and support for NAMAs [shall] be undertaken in a measurable, reportable and verifiable manner.

142. [Both the mitigation actions and the support shall be measurable, reportable and verifiable.]

143. [After implementation, both the action and the support shall be measured, reported and verified.]



144. Agree that measurable, reportable and verifiable mitigation actions by developing country Parties are only those enabled by measurable, reportable and verifiable support;

145. Only NAMAs that are supported are measured, reported and verified.

146. Only NAMAs that are supported are measured, reported and verified.

147. Measurement, reporting and verification of NAMAs and their desired outcomes shall apply only in such cases where, and to the extent that, they are enabled and supported in terms of finance and technology by Annex I Parties through an agreed financing mechanism.

148. Guidelines for such measurement, reporting and verification shall be established and approved by the COP.

149. [Measurement and reporting of NAMAs and their achieved outcomes (including those in paragraph 82 (a) of FCCC/AWGLCA/2009/INF.1):

- (a) Shall be applicable only to the mitigation actions that are enabled by technology and finance per se.]
- (b) [Shall cover both national low-emission strategies and NAMAs undertaken in the context of those strategies.]
- (c) [Shall cover the content of Parties' national schedules, including [both national low-emission] nationally appropriate mitigation strategies, long-term national GHG emission limitation or reduction pathways, and NAMAs undertaken in the context of those strategies]
- (d) [Shall cover the intensity targets or national action plans and NAMAs undertaken in the context of achieving those targets or plans]

150. [Each developing country Party shall [in addition] submit [its national GHG emissions inventories of anthropogenic emissions by sources and removals by sinks of all gases not controlled by the Montreal Protocol containing] information on] (see para. 151 (a–c) below).

151. [In addition, each developing country Party shall submit supplemental information for nationally appropriate mitigation actions by developing countries using the reporting template adopted by the [supreme body to this instrument] and contained in the appendix (*see reporting template below*). This shall contain information on, inter alia,]

- (a) [How implementation of NAMAs affects GHG trajectories at a national and/or sectoral level or the national baseline.]
- (b) [The low-emission development strategy of the country in the context of its broader sustainable development strategy and GHG emission pathway.]
- (c) [For [[major] developing countries]: quantification of actions and quantified energy intensity targets, as well as mitigation policies and measures designed to implement them (especially in major sectors) [, based on the requirements which are the same as for developed country Parties].]

152. Mitigation actions implemented by developing countries with their own resources could be reported in national communications, thereby enhancing the implementation of Article 12.1 of the Convention.

153. [Mitigation actions implemented by developing countries with their own resources shall be reported in national communications, enhancing the implementation of Article 12.1 of the Convention.]

154. [Unilateral NAMAs [and national plans that are undertaken by developing country Parties and are not enabled or supported by other Parties] may be reported through national communications.]

*[What and how to measure and report nationally appropriate mitigation actions by developing countries?]*

155. [NAMAs and their achieved outcomes shall be:

- (a) Monitored at a national level according to guidelines to be decided by the Meeting of the Parties to this Agreement at its first session, building on, inter alia, existing IPCC guidance;
- (b) Reported to the Convention according to reporting guidelines to be decided by the Meeting of the Parties to this Agreement at its first session, taking into account the principles of transparency, accuracy, consistency, comparability and completeness, and address, inter alia, achieved emission reductions, as well as their effectiveness in relation to the low-carbon/emission development strategies.]

156. [Each Party with GHG emission intensity targets shall have in place a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol. Guidelines for the national systems shall be elaborated.]

157. [The Parties shall report on nationally appropriate mitigation actions in an agreed format that indicates the impact of these measures on national emissions inventories.]

158. Emission reductions achieved by non-Annex I Parties that are below measured, reported and verified baselines shall be recognized.

[REPORTING TEMPLATE]

Party	National Circumstances	Date of latest reported National GHG Inventory and Date of inventory review	Sector	Agreed projected business as usual emissions/removals	Nationally Appropriate Mitigation Actions	Expected emission reduction or limitation <sup>a</sup>	Emission budget
Party A	GDP per capita GHG per capita Mitigation potential Etc.		Stationary Energy	XMT	List NAMAS according to: <ul style="list-style-type: none"> <li>▪ Quantified targets</li> <li>▪ Price based measures</li> <li>▪ Regulations</li> <li>▪ Other policies and measures</li> </ul>	YMT	XMT – (YMT + ZMT)
						ZMT	
			Mobile Energy				
			Agriculture				
			LULUCF				
			Industrial Processes				
			Solvents				
			Waste				
			Multiple sectors				
TOTAL				TOTAL Business As Usual Projection		UGT	TOTAL BUDGET

<sup>a</sup> Relative to BAU over the sector and expected to be achieved by undertaking listed NAMAs.

159. [Measurement and reporting shall be undertaken under the guidance of the COP [following internationally agreed guidelines that build on, inter alia, existing IPCC guidance] and involve regional centres and national expert [in accordance with national measuring and reporting procedures and practices] [and taking into account countries' national circumstances].]

160. Actions undertaken under tier two<sup>9</sup> shall be subject to appropriate reporting and accounting standards as determined by the Board of the Multilateral Fund on Climate Change and approved by Conference of Parties serving as the assembly of Parties.

*[When to submit national GHG inventories?]*

161. [In complying with their obligations under Article 12, paragraph 1, of the Convention, all developing country Parties shall submit an annual national inventory of anthropogenic emissions by sources and removals by sinks of GHGs not controlled by the Montreal Protocol.]

162. [[National inventories of developing country Parties shall be submitted [[regularly, on a more frequent basis than is current practice under the Convention [every two years]]][annually, starting as soon as possible and not later than 2011].][provided sufficient financial support by developed country Parties] For LDCs submissions shall be at their discretion based on the provision of resources and national capacities.]

163. [National inventories of developing country Parties shall be submitted regularly, and on a more frequent basis. This enhanced reporting shall start as soon as possible. In accordance with Article 4.3 of the Convention, developed country Parties and other developed Parties included in Annex II to the Convention shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties, particularly the LDCs and SIDS, in meeting the requirements of this paragraph.]

164. [Developing country Parties shall provide annual inventories as soon as possible and not later than 2011, at least for the key emitting categories, facilitated by comprehensive capacity-building and technical and financial support. These inventories shall include a national inventory report with the estimation methodologies used and shall be subject to international review by expert review teams building on existing independent review processes for Annex I Parties inventories. The Meeting of the Parties to this Agreement shall, at its first session, decide on reporting and review guidelines to be used for national GHG inventories of developing countries under this Article.]

165. [Non-Annex I Parties with emissions representing in excess of [X] per cent of global emissions in [ XXXX ] shall report every two years, with the first report to be presented no later than [ date ]. LDCs and small island developing States shall be exempt from this requirement but may report at their discretion or through the national communication process.]

*[Who will, and how to, verify nationally appropriate mitigation actions of developing countries?]*

166. [Achievement of intensity targets by major developing country Parties shall be reviewed by expert review teams.]

167. [[Unilateral NAMAs][Nationally appropriate mitigation actions][under the national action plan] by developing country Parties:]

(a) [[Shall][Should] be verified by national entities in accordance with internationally agreed guidelines.]

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<sup>9</sup> Actions that are financed by international financial and/or technical support, either through bilateral support, support from the Multilateral Fund on Climate Change, or other international financial means.

- (b) [Should not be subject to verification.]
- (c) [Shall be reviewed by the Conference of the Parties serving as the meeting of the Parties to a new Protocol.]
- (d) Shall be subject to international verification according to modalities, procedures and guidelines to be established under the authority of the COP. This verification should include international auditing (e.g. by international expert teams).

168. [Unilateral NAMAs by developing country Parties [shall][should] be verified by national entities in accordance with internationally agreed guidelines. In addition, the methodologies of the national verification process should be open to international auditing. If necessary, and subject to agreement by the developing country Party undertaking the NAMA, the domestic verification can also be confirmed by an international verification process, with due respect for the protection of confidential information.]

169. [Actions that are implemented with international support [and do not result in transfer of carbon credits][and their outcome in terms of emission reductions] [shall] be subject to [international] verification [from the third Party] together with the support as measured and reported, according to modalities, procedures and guidelines to be established under the authority of the COP. [This verification [shall][should] include international auditing (e.g. by international expert teams)][This verification should be conducted by national entities in accordance with internationally agreed guidelines].]

170. [NAMAs that are financed through the carbon market and with market finance [shall] be verified, together with the corresponding support as measured and [reported, by institutions accredited by the COP and][reported by national level institutions] according to the [same multilaterally] agreed guidelines.]

171. [NAMAs that are financed through the [flexible][carbon market] mechanisms and their outcome in terms of emission reductions [shall] be verified, together with the corresponding support as measured and reported, by institutions recognized by the meeting of the Parties under the Copenhagen Agreement using and building upon existing international guidelines for these mechanisms.]

172. [NAMAs and their achieved outcomes shall be verified under the auspices of the Convention according to agreed guidelines decided by the Meeting of the Parties to this Agreement at its first session.]

173. [Measurement and reporting of NAMAs, in accordance with the established guidelines, shall be undertaken by the host country, while the desired outcomes of NAMAs shall be verified jointly by the Financing Mechanism established under the Convention and the host country.]

*[How to measure, report and verify support provided for nationally appropriate mitigation actions by developing countries?]*

174. [An international institutional framework [[shall][should]] be [established] [needed] for measurement, reporting and verification of GHG emission reductions and support provided by developed country Parties and to provide systematic support for Parties' preparation of low-emission strategies and national inventories for emissions and removals.]

175. [Developed country Parties shall measure [(where measurable)][and], report and have support verified in accordance with international guidelines that is provided for NAMAs and [registered under the mechanism(s) referred to in paragraphs 77–82 of FCCC/AWGLCA/2009/INF.1], including the following:

- (a) [Allocation and transfer of finance for means of implementation [granted [over and above ODA], in units of an agreed common currency];]
- (b) Technology transfer, including development, deployment, application and diffusion[, in units established by the COP];
- (c) The agreed full incremental costs of technology transferred to developing country Parties [in units of an agreed common currency];
- (d) Support for capacity-building according to indicators [and in units] established by the COP.]

176. [Parties shall measure and report support that is provided for NAMAs.]

177. [Developed country Parties shall report on the measurement of support in their national communications under Article 12.3 of the Convention. Information on the support provided shall be updated and verified [annually]. [The measurement and reporting of support [shall] be based on new methodologies for assessing support.]]

178. [Parties shall regularly report on the support provided.]

179. [Developed country Parties shall report on the measurement of financial resources, transfer of technology and other actions in their national communications under Article 12.3 of the Convention. Information on actions to fulfil commitments on financial resources, transfer of technology and other actions under the Convention shall be updated annually. The measurement and reporting of these actions [shall] be based on new methodologies for assessing their adequacy, predictability and effectiveness.]

180. [[The support shall be verified under [an international][a national] register] in terms of contributions by developed [and developing] countries within their responsibilities and respective capacities.]

181. [The support shall be verified within the existing in-depth review of national communications from Annex-I country Parties.]

182. [The support shall be verified using international guidelines and be reported in an international register under the Convention.]

183. [The provision of financial resources, transfer of technologies and other actions shall be verified by the Verification Group of the finance and technology mechanism(s) of the Convention in terms of contributions by developed [and developing] countries within their respective capacities.]

184. [Financial resources from Annex I Parties shall be measured, reported and verified when provided to the Financial Mechanism. Technology transfer and capacity-building shall be measured, reported and verified during the course, and following completion, of the associated NAMA.]

185. Developed countries shall report on the measurement of support in their national communications under Article 12.3 and support shall be updated in the registry on an annual basis.

*[Cluster G: National schedules]*

186. The minimum expectations with regard to the commitments and actions Parties would register in their national schedules would be for developing country Parties whose national circumstances reflect greater responsibility or capability, nationally appropriate mitigation commitments and/or actions aimed at achieving substantial deviation from baselines.

187. [NAMAs by developing country Parties [shall][should] be incorporated in national schedules. Each [developing country] Party [shall][should] establish, regularly update and implement the contents of

national schedules, which [shall] include long-term national GHG limitation or reduction pathways, quantified emission limitation and reduction commitments [for 2020, and the measurable, reportable and verifiable mitigation policies and measures designed to meet those commitments, subject to regular review by the COP]. [Schedules should identify where specific mitigation actions were made possible through previously agreed international support] [Schedules for LDCs should include a description of intended actions, including those that might benefit from additional international support.][LDCs are invited to establish a national schedule for the commitment period [20XX] to [20XX] at their discretion.]]

[Cluster H: New Sub-section for Measurement, Reporting and Verification]

*Proposed new subsection for Measurement, Reporting and Verification:*

*Methodological issues*

188. Each Party included in Annex I shall have in place, no later than one year prior to the start of the commitment period, a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol. Guidelines for the national systems, which shall incorporate the methodologies specified in paragraph 190 below, shall be decided upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol prior to the start of the commitment period.

189. Each Party that has its GHG emission intensity targets inscribed in Annex C shall have in place, no later than one year prior to the start of the commitment period, a national system for the estimation of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol. Guidelines for the national systems, which shall incorporate to the extent possible the methodologies specified in paragraph 190 below, shall be decided upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol prior to the start of the commitment period.

190. Methodologies for estimating anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol shall be those accepted by the Intergovernmental Panel on Climate Change and agreed upon by the Conference of the Parties at its third session. Where such methodologies are not used, appropriate adjustments shall be applied according to methodologies agreed upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol at its first session. Based on the work of, inter alia, the Intergovernmental Panel on Climate Change and advice provided by the Subsidiary Body for Scientific and Technological Advice, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall regularly review and, as appropriate, revise such methodologies and adjustments, taking fully into account any relevant decisions by the Conference of the Parties. Any revision to methodologies or adjustments shall be used only for the purposes of ascertaining compliance with commitments in respect of any commitment period adopted subsequent to that revision.

191. The global warming potentials used to calculate the carbon dioxide equivalence of anthropogenic emissions by sources and removals by sinks of GHGs listed in Annex A shall be those accepted by the Intergovernmental Panel on Climate Change and decided upon by the Conference of the Parties serving as the meeting of the Parties to this Protocol prior to the start of the commitment period. Based on the work of, inter alia, the Intergovernmental Panel on Climate Change and advice provided by the Subsidiary Body for Scientific and Technological Advice, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall regularly review and, as appropriate, revise the global warming potential of each such GHG, taking fully into account any relevant decisions by the Conference of the Parties. Any revision to a global warming potential shall apply only to commitments in respect of any commitment period adopted subsequent to that revision.

*Inventory and information*

192. Each Party included in Annex I to the Convention shall incorporate in its annual inventory of anthropogenic emissions by sources and removals by sinks of GHGs not controlled by the Montreal Protocol, submitted in accordance with the relevant decisions of the Conference of the Parties, the necessary supplementary information, including sectoral information, for the purposes of ensuring compliance with Article 3, paragraph 1 (commitments by developed country Parties).

193. Each Party included in Annex I shall incorporate in its national communication, submitted under Article 12 of the Convention, the supplementary information necessary to demonstrate compliance with its commitments under this Protocol.

194. Each Party included in Annex I shall submit the information required under paragraph 192 above annually, beginning with the first inventory due under the Convention for the first year of the commitment period after this Protocol has entered into force for that Party. Each such Party shall submit the information required under paragraph 193 above as part of the first national communication due under the Convention after this Protocol has entered into force for that Party and after the adoption of guidelines as provided for in paragraph 195 below. The frequency of subsequent submission of information required under paragraph 193 above shall be determined by the Conference of the Parties serving as the meeting of the Parties to this Protocol, taking into account any timetable for the submission of national communications decided upon by the Conference of the Parties.

195. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the preparation of the information required under paragraphs 192 and 193 above, taking into account guidelines for the preparation of national communications by Parties included in Annex I adopted by the Conference of the Parties. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall also, prior to the start of the commitment period, decide upon modalities for the accounting of assigned amounts.

196. Each Party that has its GHG emission intensity targets inscribed in Annex C shall incorporate in its annual inventory of anthropogenic emissions by sources and removals by sinks of GHGs not controlled by the Montreal Protocol, the necessary supplementary information, including sectoral information, for the purposes of ensuring compliance with Article 3, paragraph 2 (actions by developing country Parties).

197. Each Party that has its GHG emission intensity targets inscribed in Annex C shall incorporate in its national communication, submitted under Article 12 of the Convention, the supplementary information with respect to the implementation of Article 3, paragraph 2 (actions by developing country Parties).

198. Each Party that has its GHG emission intensity targets inscribed in Annex C shall submit the information required under paragraph 196 above annually. Each such Party shall submit the information required under paragraph 197 above as part of the first national communication due under the Convention after this Protocol has entered into force for that Party and after the adoption of guidelines as provided for in paragraph 199 below.

199. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the preparation of the information required under paragraphs 192 and 193 above. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall also, prior to the start of the commitment period, decide upon modalities for the measurement of intensity targets.

*Review of information*

200. The information submitted by each Party included in Annex I shall be reviewed by expert review teams pursuant to the relevant decisions of the Conference of the Parties and in accordance with guidelines adopted for this purpose by the Conference of the Parties serving as the meeting of the Parties to this Protocol under paragraph 201 below. The information required under Article 5, paragraph 1 (inventory and information), shall be reviewed as part of the annual compilation and accounting of emission inventories and assigned amounts. Additionally, the information required under Article 5, paragraph 2 (inventory and information), shall be reviewed as part of the review of communications.

201. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for the review of implementation of the commitments by Parties included in Annex I by expert review teams taking into account the relevant decisions of the Conference of the Parties.

202. The information submitted under Article 5, paragraph 7 (inventory and information), by each Party that has its GHG emission intensity targets inscribed in Annex C shall be reviewed by expert review teams. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for this review.

203. Expert review teams referred to in paragraphs 200–202 above shall be coordinated by the secretariat and shall be composed of experts selected from those nominated by Parties to the Convention and, as appropriate, by intergovernmental organizations, in accordance with guidance provided for this purpose by the Conference of the Parties.

204. The review process shall provide a thorough and comprehensive technical assessment of all aspects of the implementation by a Party of this Protocol. The expert review teams shall prepare a report to the Conference of the Parties serving as the meeting of the Parties to this Protocol, assessing the implementation of the commitments of the Party and identifying any potential problems in, and factors influencing, the fulfilment of commitments. Such reports shall be circulated by the secretariat to all Parties to the Convention. The secretariat shall list those questions of implementation indicated in such reports for further consideration by the Conference of the Parties serving as the meeting of the Parties to this Protocol.

205. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, with the assistance of the Subsidiary Body for Implementation and, as appropriate, the Subsidiary Body for Scientific and Technological Advice, consider:

- (a) The information submitted by Parties under Article 5 (inventory and information) and the reports of the expert reviews; and
- (b) Those questions of implementation listed by the secretariat, as well as any questions raised by Parties.

206. Pursuant to its consideration of the information referred to in paragraph 192 above, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take decisions on any matter required for the implementation of this Protocol.

207. The national action plan submitted under Article 3, paragraph 2 (actions by developing country Parties), by each Party included in Annex C shall be reviewed by the Conference of the Parties serving as the meeting of the Parties to this Protocol. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall adopt at its first session, and review periodically thereafter, guidelines for such review.



*Proposed new subsection on review mechanisms:*

208. The Parties shall undertake reviews of this agreement, including the consideration of commitments of the Parties for subsequent periods, in the light of the best available scientific information and assessments on climate change and its impacts, as well as relevant technical, social and economic information, bearing in mind changes in Parties' circumstances. The first review shall take place at least five years before the end of 20XX, and further reviews shall take place at regular intervals and in a timely manner. Based on these reviews, the Conference of the Parties serving as the meeting of the Parties to this Protocol shall take appropriate action, which may include the adoption of amendment to the Annex B and C.

209. The Parties shall, at its first session or as soon as practicable thereafter, identify elements, including the economic development stages, response capabilities and shares of GHG emissions in the world, to be considered as criteria for changes of circumstances of the Parties.

*Proposed new subsection on compliance:*

210. The Conference of the Parties serving as the meeting of the Parties to this Protocol shall, at its first session, approve appropriate and effective procedures and mechanisms to determine and to address cases of non-compliance with the provisions of this Protocol, including through the development of an indicative list of consequences, taking into account the cause, type, degree and frequency of non-compliance. Any procedures and mechanisms under this Article entailing binding consequences shall be adopted by means of an amendment to this Protocol.

Annex III C**Enhanced action on mitigation****Policy approaches and positive incentives on issues relating to reducing emissions from deforestation and forest degradation in developing countries; and the role of conservation, sustainable management of forests and enhancement of forest carbon stocks in developing countries**

This annex contains text from subsection 1 (paras. 106–112), subsection 2 (para. 113) and subsection 3 (paras. 115–121) of chapter III, section C, on pages 110–129 of the revised negotiating text (FCCC/AWGLCA/2009/INF.1), as consolidated by the facilitator and Parties of the informal sub-group on paragraph 1 (b) (iii) of the Bali Action Plan which met at the informal meeting of the AWG-LCA held in Bonn, Germany, in August 2009. The approach to the consolidation of the text emerged out of the informal exchange among Parties and was presented by the facilitator to the meetings of the sub-group.

The paragraph numbering from document FCCC/AWGLCA/2009/INF.1 has been retained in this annex to keep consistent the references to paragraphs which have not been considered. Other subsections and paragraphs that were not discussed by Parties and were not consolidated are shown in boxes throughout this text with reference to the original paragraphs in document FCCC/AWGLCA/2009/INF.1.

Paragraphs can be traced to their origin by using the explanatory table contained in annex III C to document FCCC/AWGLCA/2009/INF.2/Add.1.

*Structural proposals:* (original text from document FCCC/AWGLCA/2009/INF.1)

1) *Subsections 3 (MRV of actions) and 4 (MRV of support) should be merged into one single subsection titled “MRV of actions and support”.*

2) *The financial arrangements to support REDD-plus actions should be included as part of the broader financial framework proposed to support NAMAs in developing countries (paras. 115 and 122 to be incorporated in chapter IV on finance).*

3) *Move paragraph 110 under “Means of implementation”.*

4) *Para. 121 duplicates paragraphs 94–96, delete paragraph 121 from section C.*

*Paras. 122–124 duplicate paragraphs 98–101, delete paragraphs 122–124 from section C.*

*Move paragraphs 125–126 to chapter IV A on finance.*

*Move paragraph 127 to “Mitigation by developing countries, Institutional arrangements”.*

*Other structural proposals that are within the text of section C:* (original text from document FCCC/AWGLCA/2009/INF.1)

5) *Move paragraphs 111 and 112 to chapter III B, subsection 3 on measurement, reporting and verification of supported actions.*

6) *Move paragraphs 113 and 114 to chapter IV A on finance.*

7) *Move paragraphs 115–118 to chapter III B, subsection 3, on measurement, reporting and verification of supported actions.*

*Proposals for additional paragraphs.* (original text from document FCCC/AWGLCA/2009/INF.1)

1. Objectives, scope and guiding principles

x.1 to x.3	(original text from FCCC/AWGLCA/2009/INF.1)
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*Objectives and scope*

106. Developing country Parties contribute to enhanced mitigation actions in the [forestry sector] [land use, land-use change and forestry sector] [agriculture, forestry and land use sector] by reducing emissions from deforestation and forest degradation, [maintaining existing carbon stocks and] [enhancing removals] [or increase in forest cover due to afforestation and reforestation], [while promoting][enhancement of carbon stocks due to [sustainable forest [and land] management] [sustainable management of forest]] [stabilization of forest cover (and thereby forest carbon stocks), conservation and maintenance of forest carbon stocks due to sustainable management of forests, reduction in deforestation rates, reduction in forest degradation, enhancement of forest carbon stocks due to conservation and sustainable management of forests, and/or increase in forest cover due to afforestation and reforestation] [increasing forest cover due to afforestation and reforestation, maintaining and enhancing forest carbon stock by forest conservation, incremental change of forest cover, sustainable management of forest, reducing deforestation, and reducing forest degradation].

[106.1 The REDD-plus mechanism shall be effective, results-based, flexible, dynamic and incentive-driven. To achieve this, the mechanism shall be implemented in successive, gradually intensifying phases, beginning with national REDD-plus strategy development and core capacity-building (phase 1), followed by the implementation of national REDD-plus policies and measures in combination with compensation for proxy-based results for emission reductions and removals from selected forest activities and land use and land-use change categories (phase 2), and finally evolving into a results-based compensation mechanism for fully measured, reported and verified emission reductions and removals from the whole forestry sector and other selected land use and land-use change sectors (phase 3).]

*Principles*

107. REDD-plus [actions] [strategies and action plans][policy approaches and positive incentives] [should] [shall]:

- (a) [Contribute to the objective in Article 2 of the Convention;]
- (b) [Be country-driven and voluntary;]
- (c) [Be integrated into NAMAs],
- (d) [Be undertaken in accordance with countries' capabilities and national circumstances]
- (e) [Be subjected to adequate, predictable and sustainable financing and technology support for these actions][insure equitable access to financial and technological support for these actions]
- (f) [Facilitate sustainable development, reduce poverty and respond to climate change in developing countries, rather than a way to help developed countries to fulfill its commitment of emission reduction].

108. [Broad country participation] [Maximize participation of developing countries], [sustainable forest management] [sustainable management of forests], [improved forest governance,] permanence and [co-benefits] [social and environmental benefits] such as biodiversity [conservation] [and other ecosystem services] should be promoted, and [domestic] leakage should be [avoided] [reduced as much as possible]. [Safeguards to protect biological diversity in host countries, including safeguards against the conversion of natural forests to forest plantations, should be established. REDD-plus actions should

complement the aims and objectives of national forest programmes and relevant international conventions and agreements.

109. Indigenous peoples and local communities [should] [shall] be [effective] involved in [the design, development and] implementation of REDD-plus actions and their rights [should be] respected, [including full prior and informed consent,] consistent with the provisions established under the respective national legislation or, in its absence, [in accordance with the United Nations Declaration on the Rights of Indigenous Peoples] [consistent with relevant international instruments and obligations]. [The COP (or the Conference of Parties serving as the assembly of the Parties) shall, in consultation with appropriate indigenous peoples' and local community organisations, develop guidelines to ensure that the rights of indigenous peoples and local communities are not adversely affected by actions to reduce emissions from deforestation and forest degradation.]

110. Developing country Parties aiming to implement REDD-plus actions [shall] [should]:

- (a) Develop REDD-plus national [implementation plans] [action plans] [strategies] [or subnational strategies and, where applicable, subnational actions], [as part of their low-carbon/emission strategies,] covering different phases of implementation when appropriate (i.e. a readiness phase, a policy implementation and demonstration activities phase, and full implementation) [and in accordance with national circumstances];
- (b) Designate a national authority for [coordinating, registering, supporting, approving and] implementing REDD-plus actions, [according to relevant national legislative and policy frameworks] [and ensuring the full and effective participation of all relevant stakeholders, including in particular indigenous peoples, local communities and women, in all the different phases of implementation of REDD-plus actions];
- (c) Establish [national] reference emission levels and/or [national] reference levels in accordance with their national circumstances [and respective capabilities], which can be [independently] reviewed and adjusted over time, and submit them to [the Conference of the Parties] [the future REDD coordinating mechanism under the UNFCCC] [and be adopted by the Meeting of the Parties to this Agreement].

111. Option 1

Robust and transparent national monitoring, reporting and accounting for emissions and removals in the forest sector [shall] [should] be established, [in accordance with national circumstances and capabilities,] with the establishment of subnational accounting as an optional interim measure [and as part of the national system] [for demonstration activities]. Each developing country Party should develop a unique emissions [and removals] accounting and monitoring system for its forestry sector which includes all subnational activities [, with adequate, predictable and sustainable financial and technical support from developed countries].

112. Option 2

National [and/] or subnational accounting of emission reductions from deforestation may be accounted for at either national or subnational level, as decided by each Party. [REDD-plus activities implemented at the subnational level shall address and account for leakage in a comprehensive and conservative way.]

#### Addition

112.1. Developing country Parties that undertake nationally appropriate mitigation actions to reduce emissions from deforestation and forest degradation shall ensure that:

- (a) Necessary actions are taken to avoid national and international emissions displacement;

- (b) Such actions are permanent and do not result in an increase in emissions from deforestation and forest degradation at a later time;
- (c) Appropriate governance structures are put in place to facilitate the appropriate use of funds provided for reducing emissions from deforestation and forest degradation;
- (d) Appropriate consultative mechanisms and domestic legislative arrangements are put in place to avoid infringement of indigenous peoples and local community rights.
- (e) Land tenure systems are recognized;
- (f) Actions are consistent with the conservation of biological diversity.

112.2. Developed country Parties shall undertake policies and measures to ensure that the import of forest products and other commodities from developing country Parties does not contribute to emissions from deforestation and forest degradation.

112.3. All Parties shall undertake policies and measures to ensure that actions undertaken by persons with legal personality of their countries do not contribute to international emissions displacement in forests of developing countries.

112.4. Developing country Parties that wish to undertake tier 2 nationally appropriate mitigation actions associated with reducing emissions from deforestation and forest degradation shall be guided by good practice guidance developed by the Intergovernmental Panel on Climate Change and any relevant decisions of the Conference of the Parties serving as the assembly of the Parties.

112.5. Tier 3 nationally appropriate mitigation actions shall not apply with respect to reducing emissions from deforestation and forest degradation and hence nationally appropriate mitigation actions for reducing emissions from deforestation and forest degradation shall not be eligible for emissions trading.

*Proposals that can be taken as alternatives or additions to the paragraphs above*

*Alternative / Addition 1: (refer to paragraphs 106.5 to 106.7 in FCCC/AWGLCA/2009/INF.1)*

Recognizing the urgent need to take further meaningful action to reduce emissions from deforestation and forest degradation in developing countries, and the role of conservation, sustainable forest management and enhancement of forest carbon stocks, all Parties shall support or undertake such action as appropriate to national circumstances and capabilities.

Within the context of nationally appropriate mitigation actions for developing countries, a framework for voluntary actions to reduce anthropogenic emissions by sources and increase removals by sinks in the forestry sector (hereinafter referred to as the REDD-plus mechanism) is hereby defined.

The purpose of the REDD-plus mechanism is to assist developing country Parties in:

- (a) Contributing to the objective in Article 2 of the Convention;
- (b) Enhancing efforts to achieve sustainable development goals through their nationally appropriate mitigation strategies;
- (c) Meeting their commitments under the Convention and related international agreements;
- (d) Conserving biological diversity and combating desertification;
- (e) Developing comprehensive land-use inventories and monitoring frameworks; and

- (f) Achieving sustainable land management.

*Alternative 2: (refer to alternative of paragraph 107 in FCCC/AWGLCA/2009/INF.1):*

A mechanism to reduce emissions from deforestation and forest degradation [and other forest-related activities] in developing country Parties is hereby defined.

The purpose of the mechanism shall be to assist developing country Parties to maintain [and enhance] forest carbon stocks while promoting their sustainable development; and to assist all Parties in contributing to the ultimate objective of the Convention by reducing emissions from deforestation and forest degradation [and by enhancing removals through other forest-related activities], and in meeting their commitments under the Convention and any of its related legal instruments.

Emission reductions [and enhanced removals] resulting from activities under this mechanism shall be certified by operational entities to be designated by the [supreme body of this agreement], on the basis of:

- (a) Voluntary participation approved by each Party involved;
- (b) Real, measurable and long-term benefits related to the mitigation of climate change; and
- (c) Reductions in emissions [or enhancements of removals] that are additional to any that would occur in the absence of the mechanism.

*Alternative 3: (refer to alternative 2 to paragraph 110 in FCCC/AWGLCA/2009/INF.1)*

REDD-plus actions will be implemented through the forest carbon mechanism according to the principles of effectiveness, efficiency, simplicity, environmental integrity, consistency and fairness. The forest carbon mechanism should address permanence, leakage and additionality.

Participation in the forest carbon mechanism will be voluntary by Parties, and should be country-driven, taking into account national circumstances and capabilities. Under the forest carbon mechanism, Parties shall:

- (a) Develop robust national carbon monitoring and accounting systems that are subject to review;
- (b) Develop national frameworks for the sustainable management of forests;
- (c) Establish national forest emissions levels, which take account of national circumstances, and that are agreed by the COP based on independent expert advice.

## 2. Means of implementation

x.1 to x.3	(original text from FCCC/AWGLCA/2009/INF.1)
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113. Recognizing the need for financial support for capacity-building, technology transfer, policy implementation and institutional arrangements [necessary for strengthening forest governance], scaling-up demonstration activities, and measuring, monitoring and verifying emission reductions and increases in removals, and changes in carbon stock from the forest sector, readiness activities for REDD-plus [including activities to be implemented up to 2012] shall be financially supported through:

### Option 1

The establishment of a [Readiness fund][Special REDD-plus fund][a new and additional fund]. The funds shall come from contributions from [developed country Parties], [market-linked revenues], [innovative funding sources including auctioning of national emissions trading allowances or of assigned amount units at international level, and penalties or fines for non-compliance of developed country

Parties with their emission reduction and financial resources commitments]. These funds shall be [new and additional to ODA], [complementary to GEF, and bilateral and multilateral funding].

#### Option 2

A window of the relevant financial mechanism established under the Convention through [an International Climate Fund][a special climate change fund][a mitigation fund].

#### Option 3

Existing funds and institutions including multilateral, bilateral and domestic arrangements.

113.1. Acknowledging that the need for financial support will vary by country, and over time, and depending on their national circumstances, [as countries progress through phases of implementing nationally appropriate mitigation actions on REDD-plus].

114. (original text from FCCC/AWGLCA/2009/INF.1)
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3. [Measurement, reporting and verification of actions] [Measurement and monitoring system]

115–116.

#### Option 1

[Developing countries participating in the forest carbon mechanism shall register their national forest emissions level in their National Schedules, with activities under the forest carbon mechanism measured, reported and verified against their agreed national forest emissions levels].

#### Option 2

[Developing country Parties requesting support [shall] [should] record under the NAMA registry REDD-plus actions undertaken within their REDD-plus national [implementation plans] [action plans] [strategies], including information on the extent and type of support requested and the nature of the action, and any information received on measurement, reporting and verification of actions, including their outcomes.]

#### Option 3 (*Alternative to paragraph 115*)

[The COP (or the Conference of the Parties serving as the Meeting of the Parties) shall develop appropriate means of measuring, reporting and verifying tier 2 nationally appropriate mitigation actions associated with reducing emissions from deforestation and forest degradation.

To assist in developing methods and procedures for measuring, reporting and verifying Tier 2 nationally appropriate mitigation actions associated with reducing emissions from deforestation and forest degradation, developing country Parties shall develop:

- (a) national capacity needs assessments;
- (b) national forest inventories;
- (c) national and, where appropriate, subnational baselines to calculate changes in emissions from deforestation and forest degradation;
- (d) strategic plans to reduce emissions from deforestation and forest degradation.
- (e) quality assurance and quality control regulations to ensure that funds for reducing emissions from deforestation and forest degradation are used directly for that purpose and not diverted for other purposes.]

## Option 4

[Developing country Parties requesting support [, including market-based eligibility,] [shall] [should] submit to [...] [the Conference of the Parties] [the future REDD coordination mechanism under the UNFCCC] their national REDD-plus [implementation plans][action plans][and] [strategies] [information on their REDD-plus actions to the Conference of the Parties] [, including information on the extent and type of support requested, the nature of the actions to be supported, [as far as possible,] their systems for measurement [, reporting and verification] [monitoring] of actions, and the outcomes of the actions].]

117. [When establishing national reference emission levels [and][or] or national reference levels, [or subnational strategies] taking into account national circumstances, developing country Parties that are requesting support shall follow the guidance decided by the [COP] [Meeting of the Parties to this Agreement at its first session] to be adopted at its [xx] session on how to establish the levels[, including ways to address [domestic] leakage]] [if applying subnational approaches for demonstration activities] [and the development of guidance in monitoring and reporting with the full effective engagement of indigenous people and local communities.]]

117.1. [A global reference level for future emissions and removals from the forestry sector and other selected land-use and land-use change categories and activities from developing countries shall be established in order to avoid carbon leakage and to ensure the environmental integrity of the mechanism.

117.2. The methodology for the establishment of a global reference level shall:

- (a) Be robust and based on objective, measurable, and verifiable criteria;
- (b) Ensure additionality both at the national and the global level compared to business as usual scenarios.]

118. [Parties aiming to implement REDD-plus actions [duly supported with assured funding ] shall, [[under the NAMA registry as mentioned in paragraph 115 above][on the basis of their national REDD-plus [implementation plans][action plans][strategies]]:

- (a) Report information on the implementation of national REDD-plus implementation plans][action plans][strategies][actions ], readiness activities, including policy implementation and demonstration activities, and identified o-benefits [such as biodiversity ];]
- (b) [Measure and report the quantitative reduction of GHG emissions [or quantitative increments in removals] achieved and/or the change in carbon stocks in relation to the [reference emission level] [/reference level] [or the aggregate reductions achieved by its registered subnational activities] [national reference levels for emissions, removals, conservation areas, and existing forest carbon stocks, where relevant,] [national reference levels for emissions and/or removals, where relevant].]
- (c) [Report information on REDD-plus actions taken [up to 2012] [during the period from 2005 up to the date a Party gives notice under this paragraph] for consideration of credit for early action;]
- (d) [Report information, to be determined by the Parties, related to the application of a correction factor to the relevant national reference levels, either higher or lower, taking into account national circumstances, historically low rates of deforestation and forest degradation, developmental divergence, and respective capabilities and capacities.]



Alternative to paragraph 118:

[As part of the measuring and reporting process described in paragraph 88, Parties shall measure and report the quantitative reduction of GHG emissions achieved and/or the change in carbon stocks in relation to the national reference emission levels.]

119. Developing country Parties [shall][should] develop robust national monitoring systems for emission reductions [and][/or] emissions removals, carbon stock changes, [in the land use, land-use change and forestry sector] [taking into account] relevant methodological guidance [to be] provided by the [COP] [Meeting of the Parties to this Agreement], on the basis of the advice received from the Subsidiary Body for Scientific and Technological Advice (SBSTA) including the use of [relevant IPCC guidelines and methodologies] [, when appropriate][the most recent IPCC guidelines [and methodologies] ] for GHG inventories] [, taking into consideration the indigenous ancient knowledge and local communities].

120. [[Measurement and monitoring][Measurement, reporting and verification] of REDD-plus actions shall be carried out in accordance with guidelines to be [agreed][decided ] by the [COP] [Meeting of the Parties to this Agreement]. These guidelines shall [cover, inter alia, eligibility criteria for access to support] [, take into consideration the advice resulting from the outputs of the work programme on methodological issues established under the SBSTA, and the type of support required, [while recognizing that higher levels of measurement, reporting and verification will be required for market-based eligibility.]]

120.1. [Monitoring, reporting and verification for REDD-plus actions shall extend to the provisions for involvement of indigenous peoples and local communities as set out above, and to consistency with sustainable forest management, noting, inter alia, the relevant provisions of the United Nations Forum on Forests, United Nations Convention to Combat Desertification and the Convention on Biological Diversity].

121. [Verification of [reported greenhouse gas emissions reductions and removals resulting from] REDD-plus actions shall be carried out by [an expert review team [under] [the guidance of ]] [national expert review teams, peer reviewed by a team of experts appointed by] the [COP] [Meeting of the Parties to this Agreement at its first session] [in accordance with the agreed rules and guidelines] [or] [a measurement, reporting and verification technical panel [appointed by the COP]] [measurement and monitoring technical panel] [which is to be established by the future coordinating REDD mechanism, which [shall] include inputs by indigenous people as well as local communities] [national experts and peer reviewed by international teams under the guidance of the COP in the case of national scale activities, and by an independent body(ies) in case of subnational scale activities]]

121.1. [To maintain the environmental integrity within and between international agreements on climate change, at the end of an agreement period, any final surplus in accounted emissions reductions and removals or enhancements compared with the reported quantity should be transferred to a subsequent international agreement on climate change.]

#### 4. Measurement, reporting and verification of support

122 to 124	(original text from FCCC/AWGLCA/2009/INF.1)
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#### 5. Institutional arrangements, including funds

x.1, 125 to 128	(original text from FCCC/AWGLCA/2009/INF.1)
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Alternative to section C:

**A. OBJECT AND PURPOSE**

x.1 to x.6 (original text from FCCC/AWGLCA/2009/INF.1)

**B. DEFINITIONS**

x.7 (original text from FCCC/AWGLCA/2009/INF.1)

**C. SCOPE**

x.8 to x.9 (original text from FCCC/AWGLCA/2009/INF.1)

**D. PRINCIPLES AND GUIDELINES**

x.10 to x.11 (original text from FCCC/AWGLCA/2009/INF.1)

**E. MEASUREMENT, REPORTING AND VERIFICATION (MRV)**

x.12 to x.15 (original text from FCCC/AWGLCA/2009/INF.1)

**F. REFERENCE LEVELS**

x.16 to x.21 (original text from FCCC/AWGLCA/2009/INF.1)

**G. PARTICIPATION**

x.22 to x.25 (original text from FCCC/AWGLCA/2009/INF.1)

**H. MODALITIES AND PROCEDURES**

x.26 to x.37 (original text from FCCC/AWGLCA/2009/INF.1)

**I. INSTITUTIONAL FRAMEWORK**

x.38 (original text from FCCC/AWGLCA/2009/INF.1)

Annex A to E (original text from FCCC/AWGLCA/2009/INF.1)

Annex III D

**Enhanced action on mitigation**

**Cooperative sectoral approaches and sector-specific actions**

This annex contains text from paragraphs 129–133 (pages 130–132) of the revised negotiating text (FCCC/AWGLCA/2009/INF.1), as reordered by the facilitator of the informal sub-group on cooperative sectoral approaches and sector-specific actions (CSAs). Paragraphs 130.1 and 131 were not considered, and the headings in italics are used to indicate the structure but will be removed from the text. This text was not negotiated.

The approach to the reordering emerged from the informal exchange among Parties in response to five questions posed by the facilitator: (1) what should CSAs do?; (2) what should CSAs do for all Parties?; (3) what should CSAs do for Annex I?; (4) what should CSAs do for non-Annex I Parties?; (5) what should CSAs not do?

Paragraphs have been renumbered, starting from 1.

Paragraphs can be traced to their origin by using the explanatory table contained in annex III D to document FCCC/AWGLCA/2009/INF.2/Add.1, or through the relevant non-paper prepared by the facilitator during the informal meeting of the AWG-LCA held in Bonn, Germany, in August 2009.

*Structural proposals:*

*1) This section should not be a separate section from NAMAs; it should be included in the section on nationally appropriate mitigation actions by developing countries.*

*2) Move paragraphs 135–138 on international aviation and maritime emissions to a new section separate from the general sectoral approaches.*

[*What cooperative sectoral approaches and sector-specific actions (CSAs) should do*]:

1. Cooperative sectoral approaches and sector-specific actions shall be focused on the enhanced implementation of Article 4.1 (c) of the Convention, on:
  - (a) The development, application and diffusion, including transfer, of technologies, practices and processes that control, reduce or prevent anthropogenic emissions of greenhouse gases not controlled by the Montreal Protocol in all relevant sectors, including, but not limited to, the energy, transport, industry, agriculture, forestry, health, tourism and waste management sectors;
  - (b) The provision of information on available technologies, conditions of access to and financing transfer of these technologies, including the development of effective modalities for the implementation of all stages of the technology cycle, from development, application, transfer, and diffusion;
  - (c) Actions that cover the whole scope of technologies for both adaptation and mitigation, including those that control, reduce and prevent emissions, and for abatement of

increases in emissions and enhancement of and removal by sinks, and include those technologies that are publicly owned or in the public domain, as well as those held by the private sector.

2. Cooperative sectoral approaches and sector-specific actions should enhance the implementation of Article 4.1 (g) and (h) of the Convention through the provision of financial resources, including for transfer of technology, at agreed full incremental costs in accordance with Article 4.3 of the Convention.

3. [Cooperative sectoral approaches and sector-specific actions [shall][should] enhance the implementation of Article 4.1(c) of the Convention. To this end, these approaches and actions [should]]:

- (a) [Be applied at the national level [only];]
- (b) Be applicable to all sectors;
- (c) [[Be tailored to][Take into account] national sector-specific needs and priorities and [consider] social and economic conditions and other relevant factors;]
- (d) [[Strengthen][Be aimed at strengthening] cooperative actions within any phase of the technological cycle and facilitate the management of technical and financial resources for the implementation of NAMAs;]

4. [*What they should do for all Parties*]:

- (a) [The implementation of cooperative sectoral approaches and sector-specific actions should [complement and support national commitments of all Parties under Article 4.1;]]
- (b) [Cooperative sectoral approaches and sector-specific actions should be implemented as analytical tools to inform national mitigation efforts, taking into account the capabilities of each sector;]
- (c) [Be used in the definition and implementation of mitigation actions in developed and developing countries;]
- (d) [Bottom-up sectoral analysis may be used as a tool for analysing mitigation potential, based on recent scientific findings and existing knowledge, using a common methodology to determine sectoral baselines of Parties;]
- (e) [Contribute to the enhancement of Parties' [measurable, reportable and verifiable] actions in order to ensure environmental integrity;]
- (f) [[Assist in fostering][Foster private- and public-sector][national initiatives in R&D, capacity-building and [technological] [technology] cooperation;]
- (g) [Cooperative sectoral approaches and sector-specific actions may also be used as instruments for both market and non-market mechanisms.]

5. [*What they should do for developed country Parties*]:

For developed country Parties, sectoral efforts may contribute to, but cannot replace, legally binding absolute emission reduction targets (QELRCs) and mitigation commitments for all Annex I Parties.

6. [*What they should do for developing country Parties*]:

- (a) [[Assist in achieving [the levels of] financing and technology transfer] [necessary to address climate change] in a measurable, reportable and verifiable manner;]

[Facilitate as appropriate in obtaining finance, technology and know-how to address climate change in a measurable, reportable and verifiable manner;]

- (b) [Facilitate the identification of best practices and best available technologies for each sector through cross-border analysis and promote the transfer of those best practices and best available technologies [from developed country Parties through analysing reduction potentials and setting indicators];]

[Facilitate the identification of best practices and best available technologies and promote the exchange of information;]

- (c) For developing country Parties, domestic sectoral efforts may be one option in the toolbox for national mitigation actions.

7. [Cooperative sectoral or sector-specific actions by developing countries to control their GHG emissions represent modalities of their implementation of Article 4.1 of the Convention. Annex II Parties must therefore meet their commitments for the provision of support for these actions to developing countries in accordance with Article 4.3, 4.5 and 4.7 of the Convention.]

Alternative to paragraph 7:

[Actions by developing countries to control their GHG emissions in the framework of cooperative sectoral approaches or sector-specific actions represent modalities of their implementation of Article 4.1 of the Convention. Annex II Parties must therefore meet their commitments for the provision of financial support in accordance with Article 4.3 and for the transfer of environmentally sound technology and know-how in accordance with Article 4.5 Convention. Article 4.7 on the balance between the provision of support by developed country Parties and implementation by developing country Parties also applies to such cooperative sectoral approaches or sector-specific actions.]

8. [*What they should not do*]:

- (a) [Cooperative sectoral approaches and sector-specific actions should not be used to circumvent or undermine the differentiation made in the Convention between Annex I and non-Annex I Parties or modify their respective commitments and obligations;]
- (b) [The implementation of cooperative sectoral approaches should [not replace the national targets of developed country Parties [or lead to [new commitments for developing country Parties, [trans-national or national emission reduction targets,]] arbitrary or unjustifiable discrimination or disguised restriction on international trade [, or the application of global uniform and equal standards for Parties]]];]
- (c) [Sectoral approaches and sector-specific actions should be cooperative and not imposed by one Party or some Parties on other Parties;]
- (d) [In particular, inclusion of international transport in an ETS shall not impose constraints and incremental costs on developing countries. Developing countries should be exempted or, if included they should be given financial and technological support to enable them to comply with these provisions without incurring any incremental costs.]

Annex III E**Enhanced action on mitigation****Economic and social consequences of response measures**

This annex contains text from paragraphs 159–165 (pages 142–146) of the revised negotiating text (FCCC/AWGLCA/2009/INF.1), as reordered by the facilitator of the informal sub-group on paragraph 1 (b) (vi) of the Bali Action Plan on economic and social consequences of response measures, and reflecting the discussion by Parties relating to the preamble and substantive paragraphs.

The approach to the reordering was presented by the facilitator at the meetings of the group and was done by using four titles which were included solely to assist the reader. No consolidation of the text took place at that stage.

Paragraphs have been renumbered, starting from 1.

Paragraphs can be traced to their origin by using the explanatory table contained in annex III E to document FCCC/AWGLCA/2009/INF.2/Add.1.

*Structural proposal:*

*Include the treatment of the underlying causes of deforestation and degradation of forests.*

[Context]<sup>1</sup>

*Proposals for preambular paragraphs and framing statements:*

1. Recognizing the special difficulties of those countries, especially developing countries, whose economies are particularly dependent on fossil fuel production, use and exportation, as a consequence of action taken on limiting greenhouse gas emissions,
2. The specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing country Parties, that would have to bear a disproportionate or abnormal burden under the Convention, should be given full consideration.<sup>2</sup>
3. There is a need to undertake a global transition to a low-emission economy in order to tackle climate change. Although this transition presents a major opportunity for all countries to follow a clean development path, it can also pose challenges for all Parties, in particular the most vulnerable countries. Parties should work together to ensure that this transition is congruent with sustainable development processes in all countries.
4. The difficulties of assessing the complex issue of potential impacts of policies are compounded by the fact that some of these impacts are unintended and often unanticipated. Wider economic and political factors can play a role in the vulnerability of socio-economic sectors and can amplify or diminish the impacts of policies.

<sup>1</sup> Titles are included solely to assist the reader.

<sup>2</sup> Proposed by Saudi Arabia during the second meeting of the informal subgroup on economic and social consequences of response measures (para. 1 (b) (vi) of the Bali Action Plan).

5. Mechanisms should be developed to allow for mitigating the impact of the response measures on productive workforces, promoting a gradual and just transition in the most affected economic sectors and contributing to building new capacities for both production- and service-related jobs.

6. Parties acknowledge that the issue of adaptation to the adverse impacts of climate change is a separate issue and one to be addressed under the adaptation building block of the Bali Action Plan, while the discrete issue of the impacts of response measures is to be addressed under enhanced action on mitigation under the mitigation building block of the Bali Action Plan.

7. [Developed country Parties shall not resort to any form of unilateral measures including countervailing border measures, against goods and services imported from developing countries on grounds of protection and stabilization of the climate. Such measures would violate the principles and provisions of the Convention, including, in particular, those related to the principle of common but differentiated responsibilities (Article 3, paragraph 1), to trade and climate change (Article 3, paragraph 5), and to the relationship between mitigation actions of developing countries and the provision of financial resources and technology by developed country Parties (Article 4, paragraphs 3 and 7).]<sup>3</sup>

Alternatives to paragraph 8:<sup>4</sup>

Alternative 2:

[Parties shall strive to implement mitigation policies and measures in such a way as to minimize social, environmental and economic impacts on other Parties, especially the poorest and most vulnerable developing country Parties, which are least able to address them, taking into account Article 3 of the Convention.]

Alternative 3:

[Parties shall strive to implement policies and measures to respond to climate change in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially those Parties that are most vulnerable to the adverse effects of climate change and least able to adapt, taking [fully] into account Article 3 of the Convention [, in particular Article 3.5]. Such efforts should not constrain or hinder progress in addressing climate change.]

[Differentiated commitments/different capacities to address economic and social consequences of response measures]<sup>5</sup>

8. [Developed countries shall [strive to] implement policies and measures to respond to climate change in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and [social, [environmental] and economic impacts on other Parties] [adverse economic, social or environmental consequences], [especially developing country Parties, and in particular those identified in Articles 4.8, 4.9 and 4.10 of the Convention, taking [fully] into account Article 3 of the Convention [, in particular Article 3.2, 3.3 and 3.5]].]

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<sup>3</sup> Proposed by India during the first meeting of the informal subgroup on economic and social consequences of response measures (para. 1 (b) (vi) of the Bali Action Plan).

<sup>4</sup> One Party requested alternatives 2 and 3 to be moved under this title and another one requested these to stay under the second title (Differentiated commitments/different capacities to address economic and social consequences of response measures).

<sup>5</sup> Titles are included solely to assist the reader.

Alternatives to paragraph 8:<sup>6</sup>

Alternative 1:

[Developed country Parties shall minimize the adverse effects of response measures, on international trade, and social, environmental and economic impacts of response measures on other Parties, especially developing country Parties, and in particular those identified in Articles 4.8 and 4.9 of the Convention.]

Alternative 2:

[Parties shall strive to implement mitigation policies and measures in such a way as to minimize social, environmental and economic impacts on other Parties, especially the poorest and most vulnerable developing country Parties which are least able to address these impacts, taking into account Article 3 of the Convention.]

Alternative 3:

[Parties shall strive to implement policies and measures to respond to climate change in such a way as to minimize adverse effects, including the adverse effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, especially those Parties that are most vulnerable to the adverse effects of climate change and least able to adapt, taking [fully] into account Article 3 of the Convention [, in particular Article 3.5]. Such efforts should not constrain or hinder progress in addressing climate change.]

Alternative 4:

[All Parties shall endeavour to reduce their emissions in such a way as to avoid economic and social consequences of taking such actions. In taking action to avoid economic and social consequences of mitigation action, special attention should be given to low-income countries, and in particular to the consequences for women and children in these countries.]

Alternative 5:

[[Developed [and developing] countries] [Developed and developing country Parties] [All Parties] [shall] [should][consider [how to avoid] negative spillover effects and positive spillover effects when designing their policies and measures to tackle climate change;]]

9. All Parties should cooperate to enhance understanding of the potential consequences of policies and measures, taking into account:

- (a) The need for information from those affected;
- (b) Evidence of actual impacts;
- (c) Both positive and negative effects.

10. [Efforts to assess the potential effects of response measures should not constrain or hinder progress in addressing climate change.]

11. [[Developed [and developing] countries] [Developed and developing country Parties] [All Parties] [shall] [should]:]

- (a) [Enhance the understanding of adverse economic and social consequences of response measures by the exchange and sharing of information between Parties on experiences relating to actual impacts of climate change response measures, cooperating in developing tools and methods and building the capacity to assess potential impacts of climate change policies and measures in the affected countries, paying particular

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<sup>6</sup> One Party requested alternatives 2 and 3 to stay under this title and another one requested these to be moved to the first title (Context).



attention to the needs and concerns of the poorest and most vulnerable developing country Parties which are least able to address them;]

- (b) Promote the understanding of the nature and magnitude of the impacts of climate change and its adverse effects, as well as the economic and social consequences of various response strategies;
- (c) Promote and cooperate in scientific, technological, technical, socio-economic and other research, systematic observation and development of data archives related to the climate system and intended to further the understanding and to reduce or eliminate the remaining uncertainties regarding the causes, effects, magnitude and timing of climate change and the economic and social consequences of various response strategies (Article 4.1 g);
- (d) Promote and cooperate in the full, open and prompt exchange of relevant scientific, technological, technical, socio-economic and legal information related to the climate system and climate change, and to the economic and social consequences of various response strategies (Article 4.1 h);
- (e) Alternative 1  
[Provide information in their national communications on any impacts of the implementation of their commitments under the Convention and any related instruments;]  
Alternative 2  
[Make use of the national communications to report on impacts experienced arising from the implementation of climate change response measures taken by another Party;]  
Alternative 3  
[Provide information in their national communications on any impacts they are experiencing as a result of the implementation of their commitments under the Convention;]
- (f) [[Assess] [Consider] the economic, [cultural,] [environmental] and social effects of their mitigation strategies and measures;]
- (g) [Request the secretariat to undertake [a] comprehensive [studies] [study] of direct costs and adverse impacts of response measures, as well as associated indirect costs and impacts on other Parties, especially on developing country Parties identified in Articles 4.8, 4.9 and 4.10 of the Convention.]

12. [All Parties shall develop and implement policies and measures to ensure that mitigation action, including, inter alia, the use of biofuels, does not contribute to deforestation and forest degradation in developing countries.]<sup>7</sup>

13. [As a means of ensuring that mitigation action, including, inter alia, the use of biofuels, does not contribute to deforestation and forest degradation in developing country Parties, all Parties shall initiate forest law enforcement, governance and trade measures.]<sup>8</sup>

14. [All Parties shall ensure that all actions to reduce emissions from deforestation and forest degradation in some countries do not result in emissions from deforestation and forest degradation in

<sup>7</sup> The placement and appropriateness of paragraphs 12 to 14 were objected to by some Parties.

<sup>8</sup> Same as footnote 7.

other countries as a result of emissions displacement. Measures may include regulation of demand-side use of forest products or other commodities that have resulted in deforestation or forest degradation.]<sup>9</sup>

*[Financial resources and transfer of technology]*<sup>10</sup>

15. [Developed country Parties [shall][should] provide support to developing country Parties, particularly those specified in Articles 4.8 and 4.9 of the Convention, in order to allow developing country Parties to address issues related to social and environmental development, economic diversification, risk assessment, modelling and insurance to prevent the adverse effects of the spillover effects.]

*Alternative to paragraph 15:*

[In the implementation of paragraphs 11 (c)<sup>11</sup> and 11 (d)<sup>12</sup> above (159.1 and 159.2 in FCCC/AWGLCA/2009/INF.1) , through the provision of financial resources, including for access, development and transfer of technology, at agreed full incremental costs in accordance with Article 4.3 of the Convention;

Recognizing that there are ways and means to reduce or avoid such impacts through careful and informed selection of policies and measures, to evaluate the effectiveness of existing tools, and to consider new ones, in order to assist developing country Parties in addressing these impacts.]

16. [Adverse economic and social consequences of response measures [shall][should] be addressed by proper economic, social and environmental actions, including promoting and supporting economic diversification and the development and dissemination of win-win technologies in the affected countries, paying particular attention to the needs and concerns of the poorest and most vulnerable developing country Parties.]

*Alternative to paragraph 16:*

[Adverse economic and social consequences of response measures shall be addressed by various means, including but not limited to promoting, supporting and enabling economic diversification, funding, insurance and the development, transfer and dissemination of win-win technologies in the affected countries, such as cleaner fossil fuel technologies, gas flaring reduction, and carbon capture and storage technologies.]

17. [[Developed [and developing] countries] [Developed and developing country Parties] [All Parties] [shall] [should]:]

- (a) Compensate for damage to the LDCs' economy and also compensate for lost opportunities, resources, lives, land and dignity, as many will become environmental refugees;
- (b) Africa, in the context of environmental justice, should be equitably compensated for environmental, social and economic losses arising from the implementation of response measures.

*[Institutional arrangements]*<sup>13</sup>

18. [A permanent [forum] shall be established, under the [COP][Subsidiary Body for Implementation], to provide a venue for Parties to share information, experiences and views on the economic [and] [,] social [and environmental] consequences of response measures, so as to enhance the

<sup>9</sup> Same as footnote 7

<sup>10</sup> Titles are included solely to assist the reader.

<sup>11</sup> This reflects the revised numbering based on the reordering of paragraphs.

<sup>12</sup> Same as footnote 11.

<sup>13</sup> Titles are included solely to assist the reader.

efforts of Parties to analyse and understand these consequences and to identify innovative policy responses and technologies to address adverse consequences. This permanent forum shall be open to participation by all Parties and intergovernmental organizations, and mobilize expertise from the scientific and modelling communities and the private sector. The [work of the] permanent forum should [lead to] [formulate] a comprehensive framework to address adverse consequences [by] [in order to], inter alia:]

- (a) Preparing guidelines on how to integrate/assess the adverse impacts of response measures;
- (b) [[Enabling] [Enable] all Parties to select appropriate and effective policies and measures that achieve the desired mitigation results while avoiding or reducing the adverse impacts of these policies and measures on the sustainable development of other Parties, particularly developing country Parties;]
- (c) [[Enabling] [Enable] developing country Parties confronted by unavoidable adverse consequences of policies and measures to strengthen their resilience and adaptive capabilities [and to] [by inter alia] undertaking economic diversification and integrate these responses into their sustainable development processes;]
- (d) Reporting periodically to the COP.

19. [The permanent [forum] should also formulate/implement a work programme that [includes] [addresses inter alia] the following components:]

- (a) [Insurance and financial risk management;]
- (b) [Modelling, analytical and methodological tools;]
- (c) [Economic diversification;]
- (d) Early warning and systematic observation;
- (e) Disaster management and preparedness;
- (f) Compensation procedures and actions including funds;
- (g) Funding;
- (h) Other related matters.]

Annex IV**Enhanced action on the provision of financial resources and investment**

This text reflects the efforts undertaken by the facilitator of the informal group on finance to consolidate paragraphs 166–179 (pages 146–169) of the revised negotiating text (FCCC/AWGLCA/2009/INF.1) following the discussion among and comments from the Parties during the informal meeting of the AWG-LCA held in Bonn, Germany, in August 2009.

In line with the approach agreed by Parties, parts of the text referring to similar concepts were reordered and consolidated with an attempt to retain the original language used in the revised negotiating text.

The consolidation of text has been undertaken in such a manner that the full rationale of Parties' proposals are reflected as alternatives. The use of brackets in the text to show alternatives is based on submissions from the Parties and is on the understanding that the entire text is subject to scrutiny and discussion by the Parties.

Paragraphs can be traced to their origin by using the explanatory table contained in annex IV to document FCCC/AWGLCA/2009/INF.2/Add.1. The table in that addendum also provides the rationale for the consolidation.

Structural proposals:

- 1) *A. Objectives, role of the UNFCCC and guiding principles;  
B. Sources of funds;  
C. Actions by all Parties;  
D. Institutional arrangements.*
- 2) *Move the text on compliance (para. 178) to an integrated section on measurement, reporting and verification or to a section on the review mechanism under the COP.*
- 3) *Paragraphs 22 (c), 28–36, 41 and 42 should be moved from the adaptation chapter to the finance chapter. Paragraphs 22 (c), 30, 32 and 35 should be inserted in this chapter as appropriate and bracketed, as they are duplicative. The other paragraphs should be inserted and bracketed.*
- 4) *Proposals on “mechanisms for facilitating financial support for NAMAs” (paras. 77–87) should be moved from the mitigation chapter to the financing chapter.*
- 5) *Paragraphs 113 and 114 on REDD and implementation of REDD-plus should be moved to the finance chapter.*
- 6) *Text identifying the objectives and scope for the “enhanced action on the provision of financial resources and investment” (elements from paras. 167–170) should precede text on principles for implementation (para. 166).*

Suggestions on placement reflected in other chapters that are related to chapter IV, include:

*Move proposals related to finance contained in paragraphs 75–80 to chapter IV A on finance*  
*Move all options included in paragraphs 77–80, except paragraph 78, subparagraph 3, to chapter IV A on finance*

*Move paragraph 81 to chapter IV A on finance*

*Move chapter III B, subsection 2, on means of implementation to chapter IV*

*Move chapter III B, subsection 4, on measurement, reporting and verification of support to chapter IV*

*Move chapter III B, subsection 5, on institutional arrangements to chapter IV*

*Move paragraphs 125 and 126 to chapter IV A on finance*

*Move paragraph 198 to chapter IV A on finance*

*Move paragraph 201 to chapter IV A on finance*

1. Preamble

1. Deeply concerned over the substantial gap between the financial resources required for enhanced action on adaptation and mitigation in developing countries and the level of financial resources currently available,
2. Noting the various estimates of financial resources needed to address adaptation<sup>1</sup> and recognizing the urgency of taking enhanced action on adaptation by all developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, in particular low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems.
3. Further, taking into account that adaptation needs are already an urgent necessity, it is clear that early and ambitious emission reduction by developed country Parties will decrease needed efforts and funding for adaptation.
4. Highlighting that financial commitments have not been met by developed country Parties and other developed Parties included in Annex II and emphasizing the urgent need for these Parties to honour their commitments in accordance with Article 4, and in particular Articles 4.3, 4.4, and 4.5 of the Convention by providing resources to support adaptation, mitigation and technology transfer, developed country Parties and other developed Parties included in Annex II shall provide new and additional to ODA, predictable and sustained level of financial resources to support enhanced action on mitigation and adaptation in developing countries;
5. To ensure the full, effective and sustained implementation of the Convention in relation to the implementation of the commitments of developed country Parties and other developed Parties included in Annex II for the provision of new and additional, adequate and predictable financial resources, on a grant or concessional basis, including for the transfer of technology, as stipulated in Article 4.3 of the Convention, and to enhance the implementation of Articles 4.1, 4.3, 4.4, 4.5, 4.8, and 4.9, in the context of Article 4.7, and in accordance with Article 11 of the Convention, the COP shall operationalize an

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<sup>1</sup> The United Nations Development Programme estimated that an additional USD 86 per year would be needed in 2015 and as per UNFCCC estimates USD 28–67 would be needed in 2030.

effective financial mechanism under the Convention, under its authority and governance, in accordance with article 11.1 and 11.2 of the Convention and in fulfilment of its functions as its Supreme Body, as mandated under Article 7.2 (h) of the Convention.

## 2. Objective and scope

6. The provision of financial resources shall be guided by the principles of the Convention and the priorities of developing country Parties, and arrangements shall be made for financial resources to be made available to enable developing country Parties, especially those particularly vulnerable to the adverse impacts of climate change, to take nationally appropriate mitigation and adaptation actions, in the context of sustainable development priorities.

7. The objective of the provision of financial resources is to promote equity and justice through further enhancement of the full, effective and sustained implementation of the Convention and the Bali Action Plan, so that the ultimate objective of the Convention can be achieved.

8. Parties agree to establish, in accordance with Article 11 of the Convention, the Financial Mechanism of the Convention with a structure that meets the specific requirements laid down under Articles 11.1 and 11.2 of the Convention. The Financial Mechanism shall enable, enhance and support mitigation and adaptation actions by developing country Parties to meet the objective(s) in accordance with Article 4.3, 4.4 and 4.5 of the Convention through the provision of financial resources to meet the agreed full incremental costs of such actions, including the full cost of adaptation activities, technology transfer and capacity-building.

9.

### Alternative 1:

The main source of funding will be new and additional financial resources, defined as resources over and above the financing provided through financing institutions outside of the framework of the financial mechanism of the Convention (listed in Article 11.5), and shall be regarded as fulfilment of commitments by developed country Parties and other developed Parties included in Annex II under Article 4.3 of the Convention, and their obligations to provide measurable, reportable and verifiable financing, as referred to in paragraph 1 (b) (ii) of the Bali Action Plan.

### Alternative 2:

The developed country Parties, other developed country Parties included in Annex II to the Convention and other Parties, according to agreed eligibility criteria, or those in a position to do so, may also provide, and developing country Parties may avail themselves of, financial resources through bilateral, regional and other multilateral channels.

### Alternative 3:

Parties may provide financial resources through bilateral, regional and other multilateral channels for actions carried out in fulfilment of the objectives of this Agreement. These financial resources shall be deemed as contributing to the fulfilment of the financial commitments of this Agreement, in accordance with the relevant provisions of this Agreement.

### Alternative 4:

There is a need for a toolbox of financing instruments that can be applied to particular technologies or national circumstances. A portfolio approach to finance is important to maintain flexibility and to be able to tailor solutions to particular financing and technology challenges.

10.

Alternative 1:

Full consideration should be given to the specific needs and special circumstances of developing country Parties, especially those that are particularly vulnerable to the adverse effects of climate change, and of those Parties, especially developing countries Parties, that would have to bear a disproportionate or abnormal burden.

Alternative 2:

The financial needs of developing country Parties vary according to their national circumstances, their economic and technical capacity, and the implementation measures undertaken.

### 3. Principles

11. [Chapeau]

Alternative 1:

The operationalization of an effective financial mechanism with a view to enhancing the implementation of the Convention shall be guided by the following principles:

Alternative 2:

The financial architecture enabled by this Agreement [shall] be guided by the following:

Alternative 3:

Parties should seek to enhance the coherence and effectiveness of multilateral climate change related financial support, guided by the following principles:

(a) Alternative 1:

Fair, inclusive, efficient and effective, and equitable and geographically balanced representation of all Parties shall be ensured within a transparent system of governance;

Alternative 2:

Fully transparent, fair, feasible, efficient and effective, and appropriately balanced representation of all Parties [shall][should] be ensured;

- (b) Fulfil the implementation of the commitments contained in Articles 4.3, 4.4, 4.5, 4.8 and 4.9 in the context of Article 4.7 of the Convention and be underpinned by the principles of equity and common but differentiated responsibilities. Developed country Parties shall provide financial resources and transfer technology to developing country Parties to make full and effective repayment of climate debt, including adaptation debt, taking responsibility for their historical cumulative emissions and current high per capita emissions. Developing country Parties will, in pursuing economic development and poverty eradication, take proactive measures to adapt to and mitigate climate change;

(c) Alternative 1:

The financial mechanism shall operate and function under the authority, governance and guidance of, and be fully accountable to, the COP, which shall decide on its policies, programme priorities and eligibility criteria, and allocation of resources for adaptation, mitigation, technology and capacity-building and any other function that may be determined by the COP;

Alternative 2:

The financial mechanism [shall][should] function under the guidance of [the COP] [the Meeting of the Parties to the Copenhagen Agreement];

Alternative 3:

The financial mechanism shall function under the strategic guidance of the COP.

(d) Alternative 1:

Coherence in the global financial architecture under the authority and governance of the COP and coordination between various financial resources and individual funds [shall] [should] be ensured in order to reduce fragmentation in the implementation of the Convention and promote access to, and enhance the variety of, available funding sources;

Maintain consistency with the policies, programme priorities and eligibility criteria adopted by the decisions of the COP, as well as all activities, including those related to funding, that are relevant to climate change, and undertaken by institutions outside the framework of the financial mechanism;

Alternative 2:

Coherence and coordination between financing under the guidance of the Meeting of the Parties to the Copenhagen Agreement and various financial mechanisms and individual funds should be encouraged and facilitated in order to reduce fragmentation, strengthen synergy and build on their comparative advantages in the implementation of this Agreement and promote access to a wide variety of available funding sources. In their interaction with relevant institutions, the Meeting of the Parties to the Copenhagen Agreement and individual Parties are requested to take these principles into account in pursuing the objectives of this agreement;

Alternative 3:

Coherence in the global financial architecture of multilateral climate change related support, including between the financial mechanism of the UNFCCC and various financial sources and funds not accountable to and outside the guidance of the COP, shall be promoted, with existing institutions utilized more efficiently;

- (e) The funding provided by developed country Parties and other developed Parties included in Annex II shall be new and additional, adequate, predictable and sustained;

(f) Alternative 1:

All the developing country Parties are eligible for the funding;

Alternative 2:

All developing country Parties [shall][should] be eligible for direct access to the financial resources, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi- arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems that are particularly vulnerable to the adverse effects of climate change with special attention given to the needs of vulnerable countries, with special preference given to the needs of LDCs and SIDS. In prioritizing support, the level of vulnerability, determined by national circumstances, respective financial and technical capabilities, levels of risk and impacts, as well as levels of poverty and climate change exposure, should be taken into account;

Alternative 3:

All developing country Parties [shall] be eligible to access financial resources, in accordance with the objectives and provisions under this Agreement, with special attention given to the adaptation needs of the most vulnerable countries;



Alternative 4:

All developing country Parties [shall][should] be eligible to access the financial resources, with special attention given to the needs of vulnerable countries, according to their financial capacity;

Alternative 5:

All Parties that meet specified criteria shall be eligible to access the financial resources with special attention given to the needs of vulnerable countries. The criteria set should be based on:

- (i) National and regional development priorities;
- (ii) Natural and geographical characteristics; resource endowment;
- (iii) Relative size of the economy;
- (iv) Economic and technological capacity;
- (v) Position on the human development index;
- (vi) Being eligible to borrow from the World Bank (IBRD and/or IDA) or to be an eligible recipient of UNDP technical assistance through its country Indicative Planning Figure (IPF);

Alternative 6:

Recognition of the urgency to address the adverse impacts of climate change on the vulnerable countries such as LDCs and small island developing states;

In providing adaptation support, priority [shall][should] be given to developing country Parties that are the most vulnerable to climate change impacts and that are the least able to adapt:

- (i) Supporting adaptation at local and national levels;
- (ii) Particularly vulnerable developing country Parties, especially:
  - Poor developing country Parties;
  - LDCs and SIDS, and countries in Africa affected by drought, desertification and floods;
  - Low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, archipelagic countries, and developing countries with fragile mountainous ecosystems;
  - Countries with unique biodiversity, tropical glaciers and fragile ecosystems;
  - Particularly vulnerable populations, groups and communities, especially the poor, women, children, the elderly, indigenous peoples, minorities and those suffering from disability;

In addition to the above, priority consideration should also be given to ecosystem-based adaptation activities;

- (g) Alternative 1:  
Funds shall be allocated for adaptation, mitigation, technology transfer and capacity building, in a balanced manner giving them equal consideration, with a special emphasis on adaptation with preferential allocation for the most vulnerable countries particularly with shares decided every two years, allocating financial resources based on the decided ratios;
- Alternative 2:  
Prioritizing support for adaptation is important;
- (h) Alternative 1:  
Enable direct access to funding by the recipients in order to recognize, promote and strengthen effective engagement at the national level and access to funds by Parties shall be inversely proportional to their contribution to greenhouse gases in the atmosphere;
- Alternative 2:  
Access to financial resources [shall][should] be simplified and improved, including direct access where appropriate[provided that the fiduciary standards of the in-country recipient entities are effective], while ensuring internationally agreed fiduciary standards and eligibility criteria. Financial resources [shall][should] be provided in an expeditious, effective, equitable and timely manner, subject to robust governance arrangements agreed by the Parties;
- Alternative 3:  
Access to financial resources [shall][should] be simple and an improved version of past experiences, and provided efficiently, effectively, and timely to eligible Parties;
- (i) Alternative 1:  
Enable a shift from a project-based approach when dealing with proposals for funding, to a programmatic approach, where appropriate, in order to make optimal use of the full range of means of implementation available and to allow for implementation at scale;
- Alternative 2:  
Delivery of financial resources should be as efficient as possible, including by following a programmatic approach if feasible;
- Alternative 3:  
Delivery of financial resources [shall][should] be goal-oriented and follow a programmatic approach, using a project approach when appropriate.
- (j) Alternative 1:  
Ensure recipient country involvement during the stages of identification, definition and implementation of activities, rendering it truly demand-driven;
- Alternative 2:  
Delivery of financial resources should be country driven and ensure ownership by developing countries.
- (k) Alternative 1:  
Financial resources shall be provided for the implementation of concrete actions;
- Alternative 2:  
The delivery of financial resources shall be for implementation and could strive to leverage other forms of financing including private-sector financing through the carbon market and to ensure participation of LDCs and SIDS

Alternative 3:

The delivery of financial resources [shall][should] strive to leverage other forms of financing, including private-sector financing through the carbon market and/or through other measures;

(l) Alternative 1:

Financial resources [shall][should] be provided in the form of [grants on a full cost basis for LDCs and SIDS and for adaptation, and a combination of] [grants and concessional loans [for mitigation and specific programmes]] as per commitments under Article 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention;

Alternative 2:

Financial resources [shall][should] be provided in a variety of forms;

Alternative 3:

Financial resources may be provided, inter alia, on a grant or concessional basis or in the form of guarantees, where appropriate;

Alternative 4:

Financial resources [shall][should] be provided in the form of [grants][grants and concessional loans for specific programmes] and should not crowd out private investment or create market distortions.

(m) Alternative 1:

New and additional financial resources shall be provided, in accordance with Article 4.3:

- (i) To meet the full agreed costs incurred by developing countries, for a defined list, in complying with their obligations for preparing national communications under Article 12.1 of the Convention;
- (ii) To meet the agreed full incremental costs, including transfer of technology, for a defined list of measures covered by Article 4.1 of the Convention;
- (iii) For technical assistance to build the readiness of developing countries to access larger pools of financing;

Alternative 2:

Financial resources may be provided for funding international, regional or national activities that contribute to the continued fulfilment of Article 4.1 of the Convention;

(n) Alternative 1:

Mutual accountability, country ownership, alignment, harmonization, focus on results [with a compliance mechanism] and sound financial management, taking into account the principles of aid effectiveness as set out in the Paris Declaration on Aid Effectiveness, and in accordance with internationally agreed environmental and social standards and safeguard policies;

Alternative 2:

Mutual accountability [with a compliance mechanism] and sound financial management, consistent with the principles of aid effectiveness as set out in the Paris Declaration on Aid Effectiveness;

- (o) Responsiveness to evolving needs and respective roles of public and private finance.

#### 4. [Generation][Provision] of financial resources

12. All Parties, in accordance with their respective capabilities, shall implement and periodically report on policies and instruments to mobilize public and private financial resources, improve enabling environments for investment in support of measures to mitigate and adapt to climate change outlined in Article 4.1 of the Convention.

13.

##### Alternative 1:

The public sector shall be the major source of funds, while market mechanisms and other private-sector sources would play a complementary role in addressing climate change. Public finance may also be used to leverage private investment and to provide incentives for additional efforts.

##### Alternative 2:

Private funding will be the main source of investment, channelled via appropriate policy frameworks and regulations that create enabling environments and demand for climate change technologies. Financing the incremental costs of technologies for adaptation and mitigation is dependent on public sources of finance and public policies. Where it is provided, public finance should be directed to areas that cannot be adequately financed by the private sector to leverage private investment and to provide incentives for additional efforts.

##### Alternative 3:

Both public and private finance should play a major role in the implementation of this Agreement. Public finance should leverage private investment and provide incentives for additional efforts, and be directed towards areas that cannot be adequately financed by the private sector, in particular for adaptation. Private funding, channelled via appropriate policy frameworks, should be the main source of necessary investment for mitigation. Parties should encourage the establishment of a robust carbon price signal, including through a progressive integration into the global carbon market, as a key means to deliver cost-effective emissions reductions globally.

14.

##### Alternative 1:

In order to meet both the scale of financial resources required and the commitments under Article 4.1, 4.3, 4.4, 4.5, 4.8 and 4.9 to support enhanced action on adaptation and mitigation by developing country Parties, including for technology cooperation and capacity-building, developed country Parties and other Parties included in [Annex II][Annex I] to the Convention shall provide scaled-up, new and additional, over and above ODA, sustained, adequate, predictable and stable financial resources in a measurable, reportable and verifiable manner, without diverting ODA.

##### Alternative 2:

In order to meet the scale of financial resources required to support enhanced action on adaptation and mitigation by developing country Parties, and for technology cooperation and capacity-building, developed country Parties and other Parties that meet agreed periodically reviewed criteria [shall] provide scaled-up, new and additional, sustainable, adequate, predictable and stable financial resources.<sup>2</sup>

##### Alternative 3:

Developed country Parties and other Parties according to their capability should ensure that scaled-up, new and additional financial resources, over and above existing ODA, are provided bilaterally and

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<sup>2</sup> In accordance with section II F and section III B4 and III C 4a (of the revised negotiating text in reference to adaptation, mitigation and their means of implementation).

multilaterally, so that climate-related support can be delivered to developing countries in a manner that is, to the extent feasible, sustainable, adequate and predictable.

15.

Alternative 1:

The [generation][provision] of financial resources shall be guided by the principles of the Convention, in particular the principles of common but differentiated responsibilities, respective capabilities, on the basis of equity, and shall take into account the polluter pays principle, historical responsibilities for emissions and developing countries' right to development.

Alternative 2:

The generation of financial resources shall be guided by the principles of the Convention, in particular the principles of equity and common but differentiated responsibilities and respective capabilities, taking into account the ability to pay and greenhouse gas emissions.

Alternative 3:

The generation of financial resources [shall][should] be guided by agreed objective criteria, the principles of common but differentiated responsibilities and respective capabilities, the economic capacity of Parties and the objective of internalizing appropriate climate change costs.

16. [Chapeau]

Alternative 1:

New and additional financial resources [shall][should] be generated through a combination of various sources, including, inter alia:

Alternative 2:

Funding for the Multilateral Fund for Climate Change (*defined below in para. 56, Option 3*) shall be provided by the following sources:

Option 1

Alternative 1:

An assessed contribution from developed country Parties based on the principles of equity, common but differentiated responsibilities, respective capabilities, GDP, GDP per capita, the polluter pays principle historical responsibility of Annex I Parties, historical climate debt, including adaptation debt, amounting to [[0.5–1][0.8][2] per cent of gross national product] at least [0.5–1 per cent of GDP].

Alternative 2:

Contributions from all Parties, based on a contribution formula developed by the COP.

Alternative 3:

An assessed contribution, by all Parties except LDCs, updated on a regular basis based on an agreed set of criteria reflecting the ability to pay and greenhouse gas emissions.

Option 2

Alternative 1:

The auctioning of [X] per cent of assigned amount units of Annex I Parties at international level.<sup>3</sup>

Alternative 2:

The auctioning of assigned amount units under the Copenhagen Agreement at international level.<sup>4</sup>

<sup>3</sup> Some proposals suggest that a percentage of these resources be used to provide funding for adaptation.

<sup>4</sup> Some proposals suggest that a percentage of these resources be used to provide funding for adaptation.

Alternative 3:

A mechanism for financing climate change actions by monetizing emission allowances through auctioning is hereby established.

This financial mechanism implies that a certain proportion of the total number of emission allowances under the Copenhagen Agreement is held back and auctioned at the international level.

The auctioning will generate revenue that shall be used to assist developing countries in implementing climate change actions.

Revenue generated by this mechanism will contribute to the fulfillment of financial obligations under the Convention of those countries taking on quantified emission reduction commitments.

The scope of this mechanism is to provide financial resources for

- (a) Adaptation
- (b) REDD
- (c) Capacity building

The Conference of the Parties shall determine the quantity of allowances to be auctioned at its [sixteenth] session for the period [.....] to support each financial need referred to in paragraph x.

In order to provide predictable funding, the method for determining the quantity to be auctioned may factor in price fluctuations in emission allowances. The quantity could be determined on the basis of a number of allowances, a fixed percentage of the total amount or a predefined revenue requirement or a combination of these methods.

The Conference of the Parties shall adopt further principles, modalities, rules and guidelines for the functioning of this financial mechanism at its [sixteenth] session, including adopting procedures for the determination of the quantity to be auctioned for subsequent periods.

Option 3

Alternative 1:

A uniform global levy of USD 2 per tonne of CO<sub>2</sub> for all countries with per capita emissions higher than [1.5][2.0] tonnes of CO<sub>2</sub>; the LDCs shall be exempt.

Alternative 2:

Taxes on carbon-intensive products and services from Annex I Parties.<sup>5</sup>

Option 4

Alternative 1:

Emissions from international aviation and maritime transport for journeys between developed countries may be auctioned through emission allowances under an international regulation scheme.

Alternative 2:

A share of the proceeds from measures to limit or reduce emissions from international aviation and maritime transport.

Alternative 3:

Funding from instruments that address emissions from international aviation and maritime transport.

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<sup>5</sup> Some proposals suggest that this option be used to provide funding for adaptation and/or technology cooperation.

Option 5

Alternative 1:

An international adaptation levy on airfares, except on journeys originating from or destined for LDCs.

Alternative 2:

An international adaptation levy on airfares, except on journeys originating from LDCs and SIDS.

Alternative 3:

A share of the proceeds from measures to limit or reduce emissions from international aviation and maritime transport.

Option 6

Alternative 1:

A share of the proceeds, [an appropriate level to be determined by the COP] [2][3–5] per cent on the CDM and extend the share of the proceeds of [2] [4] [8] [10] [12] per cent on joint implementation and emissions trading and extend share of proceeds to new sectoral market mechanisms, extended to other carbon market transactions and other compliance-linked carbon market mechanisms.<sup>6</sup>

Alternative 2:

A share of the proceeds of [2][3–5] per cent on CDM and [2][4][8][10] [12] per cent on [joint implementation and emissions trading][market-based mechanisms under the Kyoto Protocol].

Option 7

A [global] levy of 2 per cent on international financial market [monetary] transactions to Annex I Parties.

Option 8

Agreed penalties or fines on non-compliance of developed country Parties with their commitments to reduce emissions and provide support in the form of financial resources, technology transfer and capacity-building.<sup>7</sup>

Option 9

Alternative 1:

Mobilization of additional international resources may include additional contributions by developed country Parties over and above the assessed contributions, contributions from philanthropic organizations and innovative sources of finance – including implementation of the principle, external debt swap/relief for sustainable development of developing countries, special drawing rights for sustainable development and carbon market finance driven by more ambitious reduction commitments of developed countries.

Alternative 2:

Carbon market finance and private investment, leveraged as appropriate by domestic policy frameworks and targeted public funds.

Alternative 3:

A mechanism for financing mitigation actions whereby a certain proportion of the total number of emission allowances under the Copenhagen Agreement is held back in a set-aside reserve.

5. Funding activities (Proposal for additional subheading)

17. The funding shall be used to enhance actions on adaptation, mitigation, and technology development and transfer, as well as related capacity-building.

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<sup>6</sup> Most proposals suggest that this option be used to provide funding for adaptation.

<sup>7</sup> Some proposals suggest that this option be used to provide funding for adaptation.

The financial mechanism shall fund the following:

- (a) The agreed full costs for the preparation of national communications of developing country Parties;
- (b) The agreed full incremental costs incurred by developing country Parties of implementing measures covered by Article 4.1 of the Convention, including for the transfer of technology, for, inter alia, the following:
  - (i) Mitigation;
  - (ii) The deployment and diffusion of low-carbon and environmentally sound technologies (ESTs);
  - (iii) The research and development of technologies;
  - (iv) Capacity-building for mitigation and adaptation actions;
  - (v) The preparation of national action plans and their implementation;
  - (vi) Patents;
  - (vii) Adaptation in accordance with Article 4.4 and 4.9 of the Convention;
  - (viii) Any other funding decisions as may be determined by the COP.
- (c) Funding for the development and transfer of technology as a means of implementation shall be used for, inter alia, technology development, deployment and transfer, capacity-building and risk management, including insurance. It will also financially cover the implementation of action programmes developed under the Convention, such as NAPAs and TNAs, and other programmes that may be identified in the financial needs assessment project under the Convention.

6. Institutional arrangements, including funds Institutional structure

18. Institutional arrangements for the operation of the financial architecture shall have the following functions, inter alia:

- (a) Assessing the financial resources required for the fulfilment of this Agreement;
- (b) Ensuring the effective use of resources, including those generated under paragraphs x;
- (c) Coordinating financial resources, including those generated under paragraphs x for the fulfilment of this Agreement;
- (d) Measuring, reporting and verifying]/monitoring and reviewing.

19. The institutional arrangements shall be periodically reviewed to assess its fulfilment of these functions.

20. The institutional arrangements for the operationalisation of an effective mechanism<sup>8</sup> under the COP in accordance with Article 11 of the Convention defining the financial mechanism entails the following:

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<sup>8</sup> Another formulation proposed is “framework”.



Option 1

21. The COP, as the supreme body of the Convention, shall exercise its authority over and provide guidance to the financial mechanism, and shall decide on its operation and on the policies, programme priorities and eligibility criteria for financing purposes.
22. The COP shall appoint a board,<sup>9</sup> which shall function under the authority and guidance of and be accountable to the COP, to manage the financial mechanism and the related facilitative mechanism, funds and bodies, which shall have an equitable and balanced representation of all Parties within a transparent system of governance, to address all aspects of the means of implementation for developing countries, for both adaptation and mitigation.
23. The role and remit of the COP in the modalities and procedures of such a mechanism must be clear, including the setting of operational guidelines, the election of executive board members, approval of final budgets, and audit process or verification.
24. The Board shall be assisted by a dedicated secretariat of professional staff contracted by the Board.
25. The COP and the Board shall establish, manage and supervise current funds, specialized funds and funding windows to fund projects, programmes and actions aimed at mitigation, adaptation and technology transfer that are under its governance, and a mechanism to link various funds. These funds shall include:

1. *An Adaptation Fund:*

Alternative 1:

The Convention Adaptation Fund shall be established to provide new, additional and predictable financial resources to developing countries that are particularly vulnerable to climate change, especially small island developing States and least developed countries, to assist them in meeting the full costs incurred in adapting to the adverse impacts of climate change.

The Convention Adaptation Fund shall:

- (a) Fund the implementation of national and regional adaptation plans and strategies, and concrete adaptation projects and strategies, including those contained in national communications;
- (b) Fund the implementation of the activities and actions identified by the Adaptation Committee (AC),<sup>10</sup> and all other relevant processes under the Convention;
- (c) Have a multi-window mechanism to address loss and damage, including solidarity funds, rehabilitation and compensatory components, and insurance mechanisms, including microinsurance [as well as negative impacts from response measures].

The Convention Adaptation Fund shall function under and be accountable to the Financial Mechanism<sup>11</sup> under the Convention.

It shall be managed by a geographically balanced and representative Governing Board comprising three members from the five United Nations regional groups, two members from small island developing States and two members from the least developed countries.

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<sup>9</sup> Other formulations proposed are “Executive Body”, “International operating entity” and “governing council”.

<sup>10</sup> An Adaptation Committee as proposed by AOSIS.

<sup>11</sup> The Financial Mechanism as proposed by the Group of 77 and China.

In deciding on its policies and procedures, the Board shall ensure that the Convention Adaptation Fund adheres to the principles of sound financial management and transparency.

The Convention Adaptation Fund shall be operationalized no later than the sixteenth session of the Conference of the Parties.

Alternative 2:

A multilateral adaptation fund for low and medium income countries shall be established, with revenues partly channelled into national climate change funds to finance national climate change policies according to the country's specific needs and legal framework. The multilateral adaptation fund will provide funding for a prevention pillar and an insurance pillar.

2. *A Multilateral Climate Technology Fund*<sup>12</sup>:

26. A Multilateral climate technology fund shall be established to support the implementation of the technology mechanism for the provision of technology-related financial resources on a grant or concessional basis to enable the wide diffusion of environmentally sound technologies in developing countries.

27. The fund shall meet the full costs of activities such as technology R&D and demonstration of technology, capacity-building, technology needs assessments, know-how and information, and construction of policy instruments.

Alternative 1:

The fund shall be used to implement the development, deployment, diffusion and transfer of technologies by meeting the agreed full incremental costs of, inter alia, licensing IPRs, and the deployment and diffusion of technologies in developing countries.

Alternative 2:

The fund shall be used as a catalyst to provide stakeholders with incentives to implement the development, deployment, diffusion and transfer of technologies by meeting the full incremental costs of, inter alia, the deployment and diffusion of technologies in developing countries.

3. *A global fund to support a global-feed-in-tariff programme:*

28. A global fund shall be established to support a global feed-in tariff programme, providing guaranteed purchase prices, over and above the retail energy price in developing countries, of energy from renewable sources including wind, solar PV, concentrated solar power, geothermal power, hydropower and other sources, to the producers of such energy in developing countries for a period of 20 years. The Global Fund shall aim at both inducing a shift to renewable energy without compromising development momentum in developing countries, and achieving economies of scale and a sustained reduction in the costs of generating renewable energy.

4. *A Special Fund:*

29. A special fund shall be established:

- (a) For the economic and social consequences of response measures (para. 1 (b) (vi) of the Bali Action Plan);
- (b) To assist countries whose economies are highly dependent on income generated from the production, processing and export, and/or on consumption of fossil fuels and associated energy-intensive products (Article 4.8(h) of the Convention).

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<sup>12</sup> Another formulation proposed is "a multilateral technology acquisition fund".

5. *A Mitigation Fund;*
  6. *A Capacity-building Fund;*
  7. *A Technology Risk Facility to assist technologies from demonstration to commercial maturity;*
  8. *A Venture Capital Fund for start-up finance;*
  9. *A Technology Grant programme for the research and development of new technologies;*
  10. *A Climate Insurance Fund;*
  11. *Other funds as required.*
30. Modalities for determining the role of existing funds and entities for the operation of the mechanism shall be developed.
31. Funds will be administered by a Trustee or Trustees that have been selected through a process of open competitive bidding among reputable pre-qualified institutions.
32. Each of the funds and funding windows shall be:
- (a) Advised by an expert group or committee, which could also be supported by a technical, scientific advisory and monitoring and evaluation panel or panels addressing specific issues identified by the Board;
  - (b) Assisted by a independent specialized thematic assessment unit or panels, comprising experts and specialists, to carry out the relevant assessments for the disbursement of funds to the designated national entities under their respective specialized funding windows. These thematic assessment units shall be under the authority of the Executive Board and, together with the professional secretariat of the Executive Board, shall constitute the operating entity of the Financial Mechanism.
33. To ensure transparent and efficient governance, other possible components of the structure shall include representatives of all participant countries, contributors and beneficiaries, grouped in a balanced manner, a consultative/advisory group all relevant stakeholders and an independent assessment panel.
34. Developing country Parties [shall][should] establish and/or strengthen national coordinating bodies to address all aspects of the means of implementation, including strengthening the institutional capacity of national focal points and all stakeholders, including subnational and local governments.
35. The coordinating bodies shall be the national focal points for supporting the implementation of climate change projects and programmes that have received technology, finance and capacity-building assistance from developed country Parties in line with those Parties' commitments under Article 4 of the Convention.
36. In achieving its objectives, national coordinating body shall:
- (a) Ensure national ownership of and commitment to NAMAs that are to be registered internationally;
  - (b) Ensure proper assessment of the financial, technological and capacity needs of NAMAs and national adaptation measures;
  - (c) Mobilize, coordinate with and involve existing in-country mechanisms;

- (d) Facilitate the development of national expertise on adaptation and mitigation;
- (e) Coordinate climate change funding, technology transfer and capacity-building requirements, including by identifying and prioritizing needs and guiding the preparation of proposals;
- (f) Harness synergy across thematic activities and facilitate exchange of experience and good practice;
- (g) Identify stakeholders for direct access to financial assistance.

37. The national coordinating bodies shall act as the direct channel of access between developing country Parties and the board, shall approve funding for projects, programmes and actions, subject to the guidelines and procedures established by the specialized thematic assessment units approved by the Executive Board and the COP.

38. The administrative costs of national coordinating bodies established for this purpose shall be covered by international financial resources made available specifically for this purpose. A separate pool of funding to finance national coordinating bodies through an item in the secretariat's budget shall be established.

39. The designated national funding entities could also accept contributions directly, as per guidelines agreed by the COP, from and facilitate linkages with other private or national, regional, sub-regional, international bodies and/or stakeholders that may seek to implement actions relating to mitigation, adaptation and technology transfer and related activities directly.

40. A transparent, efficient and competitive procurement regime with conditionalities limited to those warranted by prudent fiduciary norms and the MRV regime foreseen under decision 1/CP. 13 should characterize funding from the Financial Mechanism established under the Convention.

41. Manage a certification and registry system for receiving, delivery of and deploying financial resources to enable developing country Parties to count financial contributions and technology support from developed country Parties towards compliance of their commitments under Article 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention and under paragraph 1(b) (ii) of decision 1/CP. 13. Financial resources will be made available to support an effective system to measure, report and verify the support provided by developed countries.

42. The Executive Board shall report annually to the COP on matters related to a proposed fund.

43. The Executive Board of the Financial Mechanism, with the approval of the COP, shall institute suitable external independent oversight as well as internal monitoring and evaluation of the management and operation of the Financial Mechanism established under the Convention.

44. The resources of the Financial Mechanism established under the Convention shall be used to meet the costs associated with the functioning of the Executive Board, the secretariat and the thematic assessment units, subject to the approval of the COP.

45. The Executive Board, established to govern and manage the financial mechanism shall determine the allocations for mitigation and adaptation, to be periodically reviewed, taking into account the historical imbalances in and the urgency of funding for adaptation.

#### Option 2

46. Institutional arrangements for enhancing the implementation of Article 11 of the Convention, through finance, technology and capacity-building, shall include:

47. The creation of a Financial and Technology Mechanism meant to ensure the full, effective, and sustained implementation of the Convention, in relation to implementation of commitments for the provision of financial resources. This is mandated under Articles 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention in accordance with Article 11, defining the financial mechanism under the Convention.
48. The Financial and Technology Mechanism shall address all aspects of cooperation on technology research, development, diffusion, and transfer in accordance with Articles 4.1(c), 4.3, 4.5 and other relevant articles of the Convention, in order to enable mitigation and adaptation under the relevant paragraphs of decision 1/CP.13.
49. The basic architecture of the Financial and Technology Mechanism under the Convention will comprise two pillars, one on adaptation and the other on mitigation.
50. An Executive Body on Finance and Technology for Adaptation (EBFTA), accountable to the COP, shall be established. The EBFTA shall have, inter alia, the following functions:
- (a) To organize, coordinate, monitor and evaluate the implementation of the comprehensive framework for adaptation, including the enabling means of financing, technology and capacity building;
  - (b) To guide and supervise the disbursement of the Adaptation Fund to be created under the Convention<sup>13</sup>;
  - (c) To coordinate disbursements from the Adaptation Fund according to the needs as indicated in national plans for adaptation submitted by developing countries to the EBFTA;
  - (d) To provide financial and technical support, upon request by developing countries, for the elaboration of national plans for adaptation;
  - (e) To manage a certification system for receiving financial resources in compliance with the financial commitments of developed country Parties under Article 4.3 of the Convention;
  - (f) To articulate technology transfer and financing mechanisms under the Convention with other United Nations organizations, multilateral financial institutions established under bilateral or multilateral development programmes and other relevant international forums not directly related to climate change, with the assistance of technical panels to be created.
51. The EBFTA will be supported by four technical panels on research and development; capacity- building; transfer of technologies for adaptation; and observation systems and information management. The technical panels shall comprise government representatives elected by the COP with balanced regional representation, who are experts on matters related to each of the technical panels, and be open to input from other experts in order to ensure transparent and efficient governance.
52. An Executive Body on Finance and Technology for Mitigation (EBFTM), accountable to the COP, shall be established. The EBFTM shall have, inter alia, the following functions:
- (a) To organize, coordinate, monitor and evaluate the implementation of the comprehensive framework for mitigation, including the enabling means of financing, technology and capacity-building.

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<sup>13</sup> Further provisions on the Adaptation Fund to be provided by the proponent of the proposal.

- (b) To govern a Mitigation Fund to be created under the Convention.<sup>14</sup>
- (c) To coordinate disbursements from the Mitigation Fund according to the needs as indicated in NAMAs submitted by developing countries to the EBFTM.
- (d) To provide financial and technical support, upon request by developing countries, for the elaboration of NAMAs.
- (e) To coordinate disbursements from the Mitigation Fund according to the needs for REDD plus activities as requested by developing countries.
- (f) To provide financial and technical support, upon request by developing countries, for the preparation of REDD plus activities.
- (g) To coordinate with regional development banks concessional loan arrangements for the private sector in developing countries for the implementation of specific mitigation activities.
- (h) To manage a registry and certification system for receiving financial resources in compliance with the financial commitments of developed country Parties under Article 4.3 of the Convention.
- (i) To articulate technology transfer and financing mechanisms under the Convention with other United Nations organizations, multilateral financial institutions established under bilateral or multilateral development programmes and other relevant international forums not directly related to climate change, with the assistance of technical panels to be created.

53. The EBFTM will be supported by five technical panels: research and development; capacity-building; transfer of technologies for mitigation; REDD plus, and market mechanisms. The technical panels shall comprise government representatives, elected by the COP with balanced regional representation, who are experts on matters related to each of the technical panels, and be open to input from other experts.

54. Technical Panels:

- (a) Both technical panels on Research and Development (TPRDA and TPRDM) shall, inter alia, coordinate multilateral technology research, development and demonstration programs and provide appropriate support to developing country parties through North-South and South-South cooperation schemes, and promote joint ventures to accelerate deployment, diffusion and effective transfer of technologies.
- (b) Both technical panels on capacity-building (TPCBA and TPCBM) shall organize, coordinate, monitor, evaluate and retrofit the implementation of capacity building activities for adaptation and mitigation and the respective financing and technology development and transfer, in developing countries. TPCBs shall also provide information and views on the fulfilment of support commitments for capacity building by developed countries. The TPCBs shall create mechanisms for sharing lessons learned and promote south-south cooperation, as well as for the dissemination of successful capacity-building activities in developing countries.
- (c) Both technical panels on transfer of technologies (TPTTA and TPTTM) shall, inter alia, provide advice and recommendations to the Executive Bodies on Finance and

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<sup>14</sup> Further provisions on the Mitigation Fund to be provided by the proponent of the Proposal.

Technology on the overall implementation of technology; promote communication and information/knowledge sharing; monitor and assess the performance and progress of technological research, development, demonstration, diffusion, and deployment, using performance indicators, and report to the COP. In addition, these technical panels shall prepare reviews on existing technologies, including information on estimated costs, risks, benefits and limitations, taking into account the circumstances of the host Party.

- (d) The Technical Panel on Observation Systems and Information Management (TPOSIM) shall, inter alia, organize, coordinate, monitor, evaluate and retrofit the implementation of systematic observation and information management (including data collection and archiving, analysis, modeling, downscaling and dissemination) activities for adaptation in developing countries. The TPOSIM shall also create mechanisms for sharing lessons learned and promoting south-south cooperation, as well as for the dissemination of successful systematic observation and information management activities for adaptation in developing countries.
- (e) The Technical Panel on REDD plus (TPREDD plus) shall, inter alia, determine methodologies for reference levels, support enhancement of REDD plus project activities within countries and other general methodological issues.
- (f) The Technical Panel on Market Mechanisms (TPMM) shall, inter alia, organize, coordinate, monitor, evaluate, and retrofit the implementation of mitigation activities in developing countries, which are carried out under the market mechanisms. The TPMM will deal with issues such as country-specific sectoral baselines, additionality, monitoring and verification plans, registration of mitigation activities and actions, issuance of credits, etc.
- (g) In addition, an MRV Panel to be created under the COP shall be responsible for establishing methodologies for MRV, measuring, reporting and verifying mitigation actions and the support received, as required by paragraph 1.(b)(ii) of decision 1/CP.13, and keeping records of mitigation and adaptation activities implemented by developing countries with their own resources.

55. The UNFCCC secretariat shall support and facilitate the activities of the EBFTA, EBFTM and the technical panels.

#### Option 3

56. A Multilateral Fund for Climate Change is hereby established.

57. The purpose of the Multilateral Fund for Climate Change is to establish, administer and deploy substantial and predictable sources of funding to support actions prescribed within this agreement.

58. The Multilateral Fund for Climate Change shall be subject to the authority and guidance of the COP (or Conference of the Parties serving as the assembly of Parties) and be supervised by a Board.

59. The constituency of the Board shall be determined by the Conference of Parties serving as the assembly of Parties and be guided by the principle of equitable geographical representation.

60. The Board of the Multilateral Fund on Climate Change shall regularly report to the COP (or the Conference of Parties serving as the assembly of Parties).

61. The secretariat of the Convention shall service the Multilateral Fund for Climate Change Fund and its Board.

62. The Multilateral Fund for Climate Change shall have five discrete funding windows:

- (a) A Mitigation Window;
- (b) A REDD Window;
- (c) An Adaptation Window;
- (d) An Insurance Window;
- (e) A Technology Window

63. The COP (or the Conference of Parties serving as the assembly of Parties) shall determine the proportion of funding that shall be allocated to each funding window and shall give priority to funding for adaptation.

64. The Board of the Multilateral Fund for Climate Change shall establish technical advisory panels for each of the funding windows.

65. The purpose of the technical advisory panels shall be to, inter alia:

- (a) Identify sources of funding;
- (b) Identify priorities for funding;
- (c) Provide assistance to recipient countries in developing project proposals and identify appropriate financial support.

#### Option 4

66. A World Climate Change Fund(WCCF) or green fund is hereby established, constituting by representatives of all participant countries, contributors and beneficiaries, grouped in a balanced and practical way;

67. The country representatives would be from finance ministries or their equivalent;

68. An executive council that will report annually to the COP on matters related to the WCCF and be supported by:

- (a) Three independent counsellors: a scientific counsellor; a counsellor from multilateral development banks; and a counsellor from social organizations;
- (b) A scientific committee to be established in consultation with the IPCC, to recommend policies, programmes and strategies;
- (c) A multilateral banks committee to be administered by an existing multilateral financial institution as identified by the COP.

69. The WCCF shall establish linkages between scaled-up funds for mitigation actions, support efforts on adaptation and provide technical assistance that include financing the national meteorological services particularly in LDCs and SIDs to enhance development and establishing of early warning systems and promote the development , transfer and diffusion of clean technologies;

70. All Parties, with the exception of the LDCs should contribute according to specified criteria;

All Parties could benefit according to specified criteria, except those developed country Parties that elect not to do so;



71. Once its operations stabilize, the WCCF could establish functional connections with existing or potential carbon units, such as those from carbon market mechanisms under a post-2012 agreed outcome and mechanisms established under the Kyoto Protocol.

Option 5:

72. Make efficient and effective use of current institutions, including the GEF, LDCF, SCCF, multilateral development banks, specialized United Nations institutions and other existing funds, with financial support provided by developed country Parties and availed of by developing country Parties through bilateral, regional and other multilateral channels, in accordance with Article 11.5 [with a robust system of measurement, reporting and verification of financial resources provided through these channels]. The Meeting of the Parties to the Copenhagen agreement and all Parties are requested to take the principles laid down in paragraph x of this Agreement into account in their interaction with relevant institutions in pursuit of the objectives of this Agreement, in particular by enhancing existing funds under the Convention and the Kyoto Protocol.

Option 6

73. Establish means to, inter alia, draw on public-private-sector expertise; recommend steps intended to mobilize domestic and international financing from a variety of domestic, bilateral, regional, and multilateral sources, including carbon markets; recommend ways to improve the effectiveness and efficiency of the Parties' aggregated efforts to mobilize investment; and address concerns of competition, targeting and overlap of such efforts.

74. *[Issues identified by Parties in the context of paragraphs 20–73 on institutional arrangements above as requiring further elaboration at the appropriate time include modalities for the determination of the role of existing funds and entity/ies for the operation of the financial mechanism].*

## 7. Compliance

75. All Annex I, [Annex II] [and Annex B Parties] shall report on an annual basis, all contributions made. Annual reports of contributions by Parties shall be maintained by the secretariat in a contribution ledger. This ledger shall be maintained on a publicly available link on the secretariat website;

76. A compliance mechanism shall be established to ensure the full implementation of the commitments of Annex I, [Annex II] [and Annex B Parties], for commitments on Articles 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention with reference to their agreed assessed contributions for the provision of financial resources, This body shall:

- (a) Review compliance of [developed country] [Annex I and Annex [B][II]Parties with their commitments on the provision of financial resources in a timely and predictable manner and in consonance with the needs identified by the developing country Party ;
- (b) [The Board of the Multilateral Fund shall undertake] Annually review compliance of [developed country]Annex I [ and Annex B][Annex II] Parties with their commitments on the provision of financial resources in a timely and predictable manner[to the Multilateral Fund for Climate Change] and in consonance with the needs identified by the developing country Party and shall make a report to the COP (or the Conference of Parties serving as the assembly of Parties) at it annual meeting;
- (c) Define non-compliance parameters, penalties and fines, or a combination of the two or other as appropriate, and implement parameters and procedures defined by the COP to retrieve funds derived from fines and penalties;
- (d) Impose financial penalties, at a minimum of ten times the market price of carbon, for any emissions in excess of the level implied by the emissions reduction commitment.

Annex V**Enhanced action on development and transfer of technology**

This annex contains text from paragraphs 180–198 (pages 169–196) of the revised negotiating text (FCCC/AWGLCA/2009/INF.1), as reordered and consolidated by the facilitator of the informal group on technology and capacity-building in accordance with the approach agreed by the informal group on technology and capacity-building at the AWG-LCA informal meeting held in Bonn, Germany, in August 2009.

Paragraphs have been renumbered, starting from 1, for ease of reading. Paragraphs can be traced to their origin by using an explanatory table contained in annex V to document FCCC/AWGLCA/2009/INF.2/Add.1. That table also contains the rationale for the consolidation.

Structural proposals:

1) *The technology chapter should be rearranged into two sections in the following order:*

*A section on objectives, scope and guiding principles*

*A section on cooperation on technology research, development, diffusion and transfer for technologies for mitigation and adaptation.*

1. *A subsection on technology needs assessments,*
2. *A subsection on enabling environments,*
3. *A subsection on capacity-building,*
4. *A subsection on technology information,*
5. *A subsection on mechanisms for enhanced cooperative action on technology development, deployment, transfer and diffusion,*
6. *A subsection on cooperative research and development.*

2) *The technology chapter should be rearranged into six sections in the following order:*

1. *A section on preambles,*
2. *A section on objectives,*
3. *A section on guiding principles,*
4. *A section on cooperative action to promote technology needs assessments, technology information, enabling environments and capacity-building,*
5. *A section on cooperative action to promote technology research, development and demonstration and deployment,*
6. *A section on institutional arrangements.*

3) *The technology chapter should be rearranged into seven sections in the following order:*

1. *A section on preamble,*
2. *A section on objectives,*
3. *A section on guiding principles,*
4. *A section on enhanced national capacity,*
5. *A section on cooperative actions on capacity-building and information sharing,*
6. *A section on cooperative actions on research, development and demonstration,*
7. *A section on institutional arrangements.*

4) *Insert a section entitled National and cooperative actions to enhance the development, application and diffusion, including transfer, of technologies, practices and processes.*

*Insert a new subsection entitled Technology action plans/technology road maps.*

Preambular paragraphs

1. [Recognizing the importance to promote and cooperate in the development, deployment, transfer and diffusion of technologies that control, reduce or prevent anthropogenic emissions of greenhouse gases in all relevant sectors under the framework beyond 2012,]
2. [Acknowledging that intensive support for promotion of technology transfer such as identification of technologies to be deployed and matching of companies with of those that own the technologies and of those that require the technologies should be provided to the developing countries that have already taken policy measure, measures on GHG reductions, and made efforts to enhance the business environment to accelerate technology transfer,]
3. [Confirming that in order to achieve the long-term goal, it is essential not only to quickly deploy practically available technologies but also to develop innovative technologies,]
4. [Guided by the principles and provisions of the Convention and the principle of learning by doing and recognizing the existing framework for meaningful and effective actions to enhance the implementation of Article 4.5 of the Convention established under Decision 4/CP.7 and enhanced under Decision 3/CP.13 (the framework for technology development, deployment, diffusion and transfer) along with Articles 4.1(c), 4.5 and 11.5,]
5. [Guided also by the best available science and broad participation of stakeholders at national and local government and community levels,]
6. [Recognizing that climate change poses a serious threat to social and economic development of all Parties and noting that the SIDS and LDCs are particularly most vulnerable to impacts of adverse effects of climate change and that these groups of countries will suffer disproportionately,]
7. [Recognizing also the urgency and the immediacy of the climate change problem the Parties agreed on a legally binding Adaptation Framework as set out in subsequent sections,]
8. [Noting the continuing growth in greenhouse gas emissions, particularly high rate of growth in developing countries,]
9. [Aware that such growth will significantly contribute to increasing concentration level of greenhouse gases in the atmosphere, with serious potential consequence,]

1. Objectives, scope and guiding principles

10. [Enhanced action on technology shall build on and enhance the implementation of the existing framework for technology action as described in the Article 4 paragraphs 1 (c), 5 and Article 11 paragraph 5, of the Convention, and decision 4/CP.7 and decision 3/CP.13, and address the gaps in, and to enhance the implementation of Articles 4.1, in particular 4.1 (c), 4.3, 4.5, 4.8, and 4.9, in the context of Article 4.7 of the Convention.]
11. [Developed country Parties shall provide new and additional financial resources, including for the transfer of technology, needed by the Developing country Parties to meet the agreed full incremental costs of implementing such measures.]
12. [Developed country Parties shall take all practicable steps to promote, facilitate and finance, the transfer of, or access to, environmentally sound technologies and know-how to other Parties, particularly Developing country Parties, to enable them to implement the provisions of the Convention.]
13. [Enhanced action on technology must give urgent and equal weight to action on technologies for adaptation in conjunction with action on technologies for mitigation and to ensuring that existing barriers to the diffusion of adaptation technologies are addressed.]
14. [All Parties, taking into account their common but differentiated responsibilities and respective capabilities, shall cooperate to promote the transfer and diffusion of, or access to, technologies and

know-how necessary for supporting the mitigation and adaptation actions taken by developing country Parties.]

15. [The developed country Parties shall promote development of innovative technologies through strengthening international cooperation including sharing roadmaps for technology development.]

16. [Building on the existing framework for technology as described in decision 4/CP.7, and reaffirmed in decision 3/CP.13, in accordance with Articles 4.1(c), 4.5 and 11.5, an] [[An] enhanced [action on technology][ set of short-, medium- and long-term national and international cooperative actions] [technology mechanism<sup>1</sup>][framework for technology][technology action framework] [shall][should] be [established] [developed] [promoted]]][Existing frameworks for technology shall be enhanced] to [[implement the technology transfer provisions][enhance the implementation of Article 4.3, 4.5, and 4.8] of the Convention] [support the short-, medium- and long-term cooperative action on technology [at the national and international level.][support global research, development, diffusion and transfer of climate related technologies]]] and [shall][should] take into account the special needs of all developing countries, particularly low-lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change.] [The framework of technology] [Enhanced action on technology development and transfer to support action on mitigation and adaptation][and shall][should] [be guided][contain] by the following [[objectives and] principles][elements]:

- (a) [Establish enabling environment for technology transfer, including, according to the IPCC, inter alia, the macroeconomic policy framework: trade and foreign investment policies, financial sector regulation and energy tariffs policies;]
- (b) [Be guided by the provisions of the Convention, particularly Articles 4.3, 4.4, 4.5, 4.8 and 4.9, and] [[B][b]uild on [and strengthen] [existing] activities [under][within] the Convention[, including the work of the Expert Group on Technology Transfer (EGTT), and expand ongoing activities relating to technology] [and under other specialized institutions] and [operate under the [authority] guidance of the COP] and be accountable to it in accordance with relevant provisions of the Convention][ and other efforts on technology development and transfer outside the Convention];

Alternatives to subparagraph (b)

Alternative 1:

[Build on domestic strategies that identify needs and priorities;]

Alternative 2:

[Enhance implementation of the Convention's framework for technology development, deployment, diffusion and transfer;]

[Complement and build on [all relevant] existing [and emerging national and international] technology-related initiatives[, including international and non-governmental organizations];]

- (c) [Address][Consider] all aspects [stages] of the technology [development cycle][spectrum], including R&D, deployment, diffusion[, demonstration] and [transfer] of [affordable] [state of the art] environmentally sound technologies to enable [all Parties, particularly] developing country Parties, to [enhance action on mitigation and adaptation][ to gain access to technologies necessary to address the worst effects of climate change];

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<sup>1</sup> Other formulations proposed include a "technology transfer mechanism", "technology facilitative mechanism", "arrangement" and "technology institutional framework".

Alternative to subparagraph (c)

Address all aspects of cooperation on technology research and development cycle, deployment, transfer and diffusion in accordance with Articles 4 paragraph 1(c), 3 and 5 of the Convention, in order to enable mitigation and adaptation as stipulated in decision 1/CP.13 (Bali Action Plan).

- (d) [Wide diffusion of existing technologies similar to scale of information communication technologies;]
- (e) [Promote coherence by [integrating and ]expanding [ongoing activities [inside and outside the Convention] related to technology][catalytic and integrated actions on technology in order to support global mitigation and adaptation responses];]
- (f) Facilitate national actions and international cooperative actions that maximize the full potential of technology to reduce greenhouse gas emissions and build climate resilience;
- (g) [[Aim to] achieve accessibility], [Facilitate the removal of barriers for technology development and transfer,] [affordability, appropriateness] and adaptability of technologies [required][identified][needed] by [all Parties, in particular][developing countries], as appropriate, in order to [[support] [enhance] [their action on mitigation and adaptation] [Articles 4, paragraphs 1 (c) and 5 of the Convention]][ address the worst effects of climate change and to take nationally appropriate action on [mitigation and] adaptation];
- (h) [[[Aim to] [identify and achieve the removal of][remove]][Address][Serves as a primary vehicle in the] [barriers [for][to] technology development[, deployment] [and][,] transfer] [and diffusion][ to developing countries by reducing tariffs on environmental goods and services and strengthening the IPRs];]
- (i) [[Further] Stimulate the formation and development of [local,] national and international innovation systems [and markets for technologies for mitigation and adaptation], [creating enabling trade and investment environments, [[creating] the creation of favourable investment and enabling environments], and [engaging][prompt] [engagement [with][of]] the private sector];]

Alternative to sub paragraph (i)

[Assist developing countries in building sustainable national regulatory and institutional frameworks that promote the development, deployment and diffusion of environmentally sound technologies;]

- (j) [[Provide for full [agreed] cost and full [agreed] incremental cost, as referred to in Article 4.3 of the Convention.] [In order to implement the framework Parties may avail themselves of resources in accordance with the relevant provisions set out in Article Z];]

Alternative to sub paragraph (j)

[Take into consideration the full incremental costs and benefits of adopting environmentally sound technologies;]

- (k) [[[Take into account the [[important] role] [relevance] of][Rely on developed country Parties'] public finance][ Public finances shall be allocated by the Annex-I Parties] in supporting technology [outcomes, including the needs][R&D] [and] [to leverage private investment] [in the] [demonstration], deployment, diffusion and transfer of technologies [to the developing countries.] [Parties, particularly Annex II Parties, are urged to support R&D, deployment and diffusion of technologies by public/private sector];]
- (l) Recognize the [importance of enabling environments, the engagement of the private sector, and the key roles that the public and private finance will play in the development, deployment, diffusion and transfer of technologies] [role that small and medium-sized

enterprises could play in the success of adaptation and mitigation efforts and in economic development] [and take into account the obstacles they face regarding the development and transfer of technology];

Additions of new sub paragraphs:

- (m) Address the unique technology relevant issues specific to SIDS recognizing scale of economies, enabling environments, and geographical remoteness for both adaptation and mitigation.
- (n) Ensure participation of all stakeholders at all levels of decision-making on technology cooperation and sharing, especially women, youth, indigenous peoples and local communities, among others.
- (o) Efforts for enhanced action on technology development, deployment and diffusion should aim at:
  - (i) Reducing greenhouse gas emissions, facilitating low-emission development and contribute to appropriate adaptation, to contribute to the overall objective of the Convention;
  - (ii) Accelerate research, development, diffusion and transfer of environmentally sound technologies among all Parties.
- (p) Improving energy efficiency and environment in upstream and downstream activities relating to fossil fuels.
- (q) Promote diversified energy particularly carbon capture & storage technology.
- (r) Support for the promotion of inward foreign direct investment, labour-intensive exports (manufacturing and services), trade liberalization, competition, access to developed countries' markets and human resource development.
- (s) Support for price and ownership reforms in energy and associated industries.
- (t) Technical assistance for economic diversification.
- (u) Enhance R&D through supporting and improving of existing and establishment of new national and regional centres of excellence working on environment- friendly technologies, in particular in developing countries.
- (v) Support to be prioritized for the least developed and most vulnerable countries.
- (w) Accelerate innovation of environmentally sound and affordable technologies for mitigation and adaptation, in all countries and regions and scale up and speed up deployment and diffusion of environmentally sound and affordable technologies for mitigation and adaptation, especially in developing countries.
- (x) Provide Parties with [pathways to low-emission and climate-resilient technology implementation][a shift to sustainable development paths], promote measures that facilitate technology innovation and diffusion by all Parties, including north-south and south-south and triangular action and contribute to the development of national long-term strategies for low-emission development and climate change adaptation.
- (y) Immediately to ensure that any technology transfer to developing countries is appropriate for the developing countries concerned in order to enable its effective utilization.
- (z) Assess the need for increased global or regional RD&D for targeted technologies, especially those with particular relevance to developing countries, and facilitate activities to address any gaps

- (aa) Reduce or remove tariff barriers to the import and export of renewable energy and energy efficiency technologies as well as environmentally sound adaptation technologies.

2. Promoting [Cooperati[on]live policies between the developed and developing countries on technology research, development, diffusion and transfer]<sup>2</sup>

*Note: Proposals for the implementation of enhanced action on technology are reflected in this section. In advancing their proposals, Parties in some cases also proposed a governance structure for such action. Such proposals are reflected in paragraphs 45–47 below (196–198 in FCCC/AWGLCA/2009/INF.1).*

*Proposed new section entitled National and cooperative actions to enhance the development, application and diffusion, including transfer, of technologies, practices and processes*

*National actions*

17. Recognizing that national policies and actions drive technology financing, leverage the private sector, build capacity, create suitable investment conditions, and support technology RD&D, demonstration, deployment, diffusion and transfer, Parties will, in the context of their national strategies, and consistent with their national circumstances:

- (a) Implement actions, consistent with relevant national social, economic, energy and environmental policies, that establish conditions which promote the development, deployment and diffusion of environmentally sound technologies;
- (b) Establish effective enabling environments with policies and regulations, economic instruments, and other related measures to foster technology diffusion;
- (c) Promote private investment and matchmaking, encourage innovative financial mechanisms and reduce market, technology and political risks to private investment in climate technologies;
- (d) Establish national programmes that support common performance standards, testing, verification and certification programmes for technologies for mitigation and adaptation;
- (e) Establish training, information and workforce development programmes to build capacity, including national centres of excellence, to ensure that all market actors understand the costs, performance and benefits of climate change technologies;
- (f) TNAs [to be fully elaborated taking into account the findings of the 2006 TNA review and expanded to cover more in-depth assessments of obstacles in the functioning of relevant technology innovation systems, including detailed assessment of technology capacity and markets. TNAs should also be shared and made publicly available] [to be carried out within the framework of the NAPAs and NAMAs in order to ensure consistency and coherence among the various efforts; TNAs should not constitute a barrier to short-term technology transfer];
- (g) Capacity-building, taking into account the various activities completed or under way on a bilateral or multilateral basis and mainstreamed within an enhanced framework for capacity-building for mitigation and adaptation (decision 2/CP.7);

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<sup>2</sup> Technology cooperation in specific technologies and sectors is reflected in paragraphs 129–131 of revised negotiation text (FCCC/AWGLCA/2009/INF.1).

- (h) Knowledge, technical and other necessary expertise in existing institutions and organizations, including regional centres and networks [shall][should] be developed, used, shared and sustained at regional and national levels;
- (i) Parties should strengthen their national technology research and their national technology research, development and demonstration programmes and provide appropriate support to developing country Parties through, inter alia:
  - (i) Reinforcing North–South, South–South and triangular cooperation with the aim of promoting endogenous technologies of developing countries and prioritizing technologies for mitigation and adaptation that might have high costs but also high potential for GHG mitigation and/or increase resilience to negative impacts of climate change;
  - (ii) Providing opportunities for participation by developing country Parties in joint RD&D programmes for specific technologies and joint - ventures to accelerate deployment, diffusion and effective transfer of technologies;
- (j) Focused voluntary technology-oriented agreements, including on partnerships within and outside the Convention and engaging the private sector and civil society organizations [shall][should] be recognized. Such agreements could include cooperative R&D and large-scale demonstration projects, technology deployment projects, cooperation on specific sectors or gases, and cooperation on climate observation and warning systems for enhancing resilience.

#### *Cooperative actions*

18. Recognizing that cooperative actions should be conducted and acknowledged that promote the development and deployment of environmentally sound technologies. Parties will engage in cooperative actions, to the extent appropriate and consistent with their national strategies that:

- (a) Strengthen technical and institutional capacity to sustain cooperative technology development, deployment, diffusion and transfer activities including enhancements in policies, standards, information and assessment, and investment programmes;
- (b) Promote greater public and private sector investment in RD&D for targeted EST technology areas through enhanced support for strengthened incentives for private-sector participation in RD&D;
- (c) Promote participation in international programmes that support the development and use of common performance standards, testing, verification and certification programmes.
- (d) Establish international partnerships to advance the development, deployment and transfer of environmentally sound technologies;
- (e) Support, strengthen and expand globally coordinated research programmes and networks or alliances of climate technology research institutes to engage developing countries;
- (f) Capacity-building, taking into account the various activities completed or under way on a bilateral or multilateral basis and mainstreamed within an enhanced framework for capacity-building for mitigation and adaptation (decision 2/CP.7);]
- (g) Knowledge, technical and other necessary expertise in existing institutions and organizations, including regional centres and networks [shall][should] be developed, used, shared and sustained at regional and national levels;



- (h) Parties should strengthen their national technology research and their national technology research, development and demonstration programmes and provide appropriate support to developing country Parties through, inter alia:
  - (i) Reinforcing North–South, South–South and triangular cooperation with the aim of promoting endogenous technologies of developing countries and prioritizing technologies for mitigation and adaptation that might have high costs but also high potential for GHG mitigation and/or increase resilience to negative impacts of climate change;
  - (ii) Providing opportunities for participation by developing country Parties in joint RD&D programmes for specific technologies and joint - ventures to accelerate deployment, diffusion and effective transfer of technologies;
- (i) Focused voluntary technology-oriented agreements, including on partnerships within and outside the Convention and engaging the private sector and civil society organizations [shall][should] be recognized. Such agreements could include cooperative R&D and large-scale demonstration projects, technology deployment projects, cooperation on specific sectors or gases, and cooperation on climate observation and warning systems for enhancing resilience.

*[Technology action plan*

19. [Develop] [A] technology action plan [to serve] [shall be drawn up] [as a starting point] [for the work of the Executive Body] [for the work of a body for the technology mechanism] [for enhanced cooperative action on technology].<sup>3</sup> [It shall aim to accelerate research, development, diffusion and transfer and use of environmentally sound technologies [[among all Parties], [particularly]] [to the developing countries with a view to implementing the Annex I commitments contained in the Convention] [from] [Annex II Parties] [the developed Parties that have commitments under the Convention and the other developed Parties in a position to transfer environmentally sound technologies] [developed country Parties and other developed Parties included in Annex II of the Convention] [to] [non-Annex I Parties] [developing country Parties and other Parties in need of abovementioned activities], in accordance with Article 4.5 of the Convention, in order to support action on mitigation and adaptation [and] [to] promote a shift to sustainable development paths. The technology action plan shall develop an effective strategy to identify and propose specific measures to overcome the economic and technical barriers and to assess the required steps to accelerate research, development and transfer of environmentally sound technologies for both mitigation and adaptation.]

- (a) It will include specific actions and timelines for the first three years, and will be updated for successive three-year periods;
- (b) To realize the full potential of technology, the TAP shall support all stages of the technology cycle, including research, development, demonstration, diffusion, and transfer;
- (c) The TAP will define specific policies, actions and funding requirements for all relevant technologies under the following classifications: public domain technologies, patented technologies and know-how, future technologies;
- (d) The establishment of national and regional technology centres of excellence to reinforce north–south, south–south and triangular cooperation, including joint research and development (details can be annexed to the legal/agreed outcome).

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<sup>3</sup> This proposal is presented in the context of proposals to establish an executive body on technology and a multilateral climate technology fund reflected in paragraphs 46, option 2, below.

20. [To realize the full potential of technology,] the action plan shall support all stages of the technology development cycle, [including technology research and invention through scientific and technical cooperation, technology development, technology transfer and diffusion,] [and [articulate] [linked] with the financial mechanism of the Convention in order to [secure] assist with obtaining the necessary financing] [and ensure that financing for technology transfer, including all available means to ensure the affordability of technologies, products and related services, is available].
21. [The action plan [shall][should] include specific policies, actions, institutional arrangements and funding requirements for existing and emerging [technologies in the public domain, patented technologies and [future]] [IPRs protected] technologies to be developed in the future. The plan shall also include clear actions for the first three years, and be reviewed after every [updated for successive] three-year periods in light of lessons learned.] This should also include: public domain technologies and future and innovative technologies.]
22. Parties should promote the development of innovative technologies and strengthen international technology cooperation, including through the formulation and sharing of national technology road maps as part of the technology action plans. Such road maps should include:
- (a) Identification of technological options for specific sectors;
  - (b) [Identification of] obstacles to the development and transfer of identified technological options;
  - (c) Policy instruments and infrastructure required for the deployment, diffusion and transfer of identified technological options;
  - (d) Capacity-building needs;
  - (e) Opportunities for joint technology R&D between developed and developing countries.]

*[Technology action plans/technology road maps:*

23. Parties shall promote the development of innovative technologies and strengthen international technology cooperation, including through the following actions:
- (a) A series of prioritized technology action plans shall be developed to, inter alia, identify the potential for the technology to contribute to global, regional or national mitigation and adaptation responses, identify the gaps and barriers to commercial maturity and recommend further actions that may be required to realize this potential;
  - (b) Technology action plans shall be informed and supported by comprehensive [global] technology road maps [to provide an overview of what needs to be done to promote wider and more rapid development and deployment of key technologies for mitigation] which shall identify:
    - (i) The current state of development for the technology;
    - (ii) Key stakeholders and relevant existing and emerging efforts contributing to the development of the technology;
    - (iii) Gaps and barriers to commercial maturity;
    - (iv) Opportunities for collaborative effort between developed and developing countries, including their respective private sectors;

- (c) Technology action plans and technology road maps will build on and work collaboratively with other relevant international and national efforts and institutions to maximize efficiency of effort and avoid duplication.]

*[Technology needs [assessments], enabling environments, [and] capacity-building, technology information, and mechanisms for enhanced cooperative action on technology development, deployment, transfer and diffusion] [Enhanced national capacity] [Cooperative action to promote technology needs assessment, technology information, enabling environments and capacity-building]*

24. [Cooperation on technology [Technology outcomes] [shall][should] be enhanced by the following [elements] [catalytic actions]:

*Technology needs assessments*

25. [TNAs] [to be fully elaborated taking into account the findings of the 2006 TNA review and expanded to cover more in-depth assessments of obstacles in the [access to, development and transfer of] [functioning of] relevant technology innovation systems, including detailed assessment of technology capacity, barriers and markets. TNAs] should [continue to [also] be [shared and] made publicly available] [and] [could] [to] be carried out within the framework of the [NAPAs], [and] NAMAs and other relevant reports and information including national communications in order to ensure consistency and coherence among the various efforts; [TNAs should not constitute a barrier to short-term technology transfer to the developing country Parties.]; [Technology road mapping exercises that identify, inter alia, opportunities for partnerships, as well as obstacles to technology development and deployment, could constitute an element of TNAs;]

Alternative to paragraph 25:

[A single process will be carried out to identify technology needs (TNAs), [which could include] nationally appropriate mitigation actions (NAMAs)[, NAPAs,] and [long-term planning for achieving low-emission development] [which should be integrated into national low-emission development strategies and which could include NAMA/NAPA processes and the use of country-specific technology development plans]. [This process will result in preparation of a national low-emission development strategy, as described in Article X, paragraph Y.] This single document should contain an in-depth assessment of [obstacles in] [national barriers to] the functioning of relevant technology innovation systems, including detailed assessment of technology capacity and markets. Assessment of technology needs for adaptation, and barriers to the deployment of these technologies, should be carried out in the context of climate-resilient development, as described in Article P, paragraph Q.] [Action to enhance national capacity on technology shall include the following elements:

- (a) Developing countries shall be assisted in completing Technology Needs Assessments, integrated with national low-carbon development strategies. TNAs should include, inter alia, in-depth assessments of national barriers to technology deployment and diffusion, capacity for technology adoption and related capacity-building needs as well as relevant market conditions;
- (b) [Enhancement of the TNA process to support full participation by all developing countries, ][TNAs to be fully elaborated] taking into account the findings of the 2006 TNA review[, the revision of the TNA handbook and lessons learned in the field testing and early implementation phases,] and expanded to cover more in-depth assessments of obstacles in the functioning of relevant technology innovation systems, including detailed assessment of technology capacity and markets. TNAs should also be shared and made publicly available and be carried out within the framework of the NAPAs and NAMAs in order to ensure consistency and coherence among the various efforts;

- (c) Priority areas shall be identified sector by sector and technology by technology. For the most GHG-intensive sectors, nationally appropriate deployment schemes should be developed within the context of TNAs and low-emission development strategies, taking into account specific barriers for technology deployment in these sectors.]

#### *Enabling environments*

26. [Enabling environments] [which create the conditions conducive to private and public sector technology development, deployment, transfer and diffusion] [– technology-specific policies and measures with both adaptation and mitigation benefits [need to] [should] be defined [[/strengthened] and implemented]. Policies and measures [should] [may] include deployment schemes for adaptation measures and [low-greenhouse gas emission technologies] measures to address barriers to technology development, deployment and diffusion, and technologies for adaptation [and national energy and climate policies]];

#### *Capacity building*

27. Capacity-building, also taking into account the various activities completed or under way on a bilateral or multilateral basis [and in accordance with the capacity-building theme articulated in decision 4/CP.7 and 3/CP.13, as well as the framework for capacity-building in developing countries (decision 2/CP.7)] [and mainstream[ed]ing within an enhanced framework for capacity-building for mitigation and adaptation [(decision 2/CP.7)]], under the Convention; capacity-building activities should be guided by the Convention. Capacity-building needs should be identified and delivered in the overall context of support for mitigation and adaptation;

28. [Information to support actions that enable technologies for mitigation and adaptation,] knowledge, technical and other necessary expertise in existing institutions and organizations, including local and subnational authorities, existing regional centres and networks [shall][should] be developed, strengthened, used, shared and sustained at regional and national levels.]

#### *Proposed the following paragraph under new section entitled Cooperative actions on capacity-building and information sharing:*

29. A programme for capacity-building for accelerated technology development, deployment and diffusion in developing countries shall be developed. This programme for capacity-building should include the following elements, [taking into account the various activities completed or under way on a bilateral or multilateral basis and mainstreamed within an enhanced framework for capacity-building for mitigation and adaptation (decision 2/CP.7)];:

- (a) Analyses, information, training activities and advice on development and implementation of relevant policies, institutional and regulatory frameworks that promote the development and use of environmentally sound technologies;
- (b) Advice and support for the development and implementation of national technology deployment schemes;
- (c) Advice and technical assistance to developing countries in order to facilitate increased private investment in key GHG emitting sectors, including advice on the establishment of public–private partnerships for promoting environmentally sound technologies;
- (d) Knowledge, technical and other necessary expertise in existing institutions and organizations, including regional centres and networks [shall][should] be developed, used, shared and sustained at regional and national levels;

- (e) [Advice and support for the identification of] policy instruments and infrastructure required for the deployment, diffusion and transfer of identified technological options.

30. Parties shall promote the accelerated penetration of cost-effective technologies in non Annex-1 countries through pilot projects which strengthen their capacity to develop specifications for these applications which are appropriate to national circumstances, and create human resources necessary for the design, implementation, and operation and maintenance of these applications.

*Technology road maps*

31. [In accordance with their respective commitments in the Convention, the [Parties [shall][should] promote and support the development of innovative and climate friendly technologies and [strengthen international technology cooperation,] including through the formulation and sharing of national technology road maps. Such road maps [shall][should] [include] be consistent with TNA and should in accordance with Article 4, paragraph 5, of the Convention [include]:

- (a) National needs assessment;
- (b) Identification of technological options for [specific] [all] sectors[ and all gases];
- (c) Improved understanding on the role of oceans on climate change and vice-versa, and its effects on marine ecosystems, marine biodiversity and coastal communities, especially in developing countries and small island states; including marine scientific research and sustained integrated ocean observatory systems;
- (d) [Removing] [Identification of] [obstacles] [barriers] to the development, deployment, diffusion and transfer of [win-win technological options such as carbon capture and storage, clean fossil fuel, non-energy use of fossil fuel technologies] of [[identified] technological options];
- (e) Policy instruments and enabling environments infrastructure required for the deployment, diffusion and transfer of identified technological options;
- (f) Capacity-building needs;
- (g) Opportunities for joint technology R&D between developed and developing countries should be paid by developed countries.]
- (h) R&D between developing countries, and triangular cooperation.
- (i) All Parties shall periodically review progress and identify areas where international cooperation should be strengthened.]

*[Cooperative actions on research and development]*

32. [[All] [[Developed country] Parties], [in accordance with national capabilities, and other developed Parties included in Annex II of the Convention] [The developed Parties that have commitments under the Convention and the other developed Parties in a position to transfer environmentally sound technologies] [shall][should] [take efforts to] strengthen their national technology research, development and demonstration (RD&D) programmes [and provide appropriate support] [with the aim of a substantial increase of private and public energy-related RD&D compared to current levels, working towards at least a doubling of global energy-related RD&D by 2012 and increasing it to four times its current level by 2020, with a significant shift in emphasis towards safe and sustainable low greenhouse gas emitting technologies, especially renewable energy] [towards] [[to developing country Parties] through], inter alia:]

- (a) [Reinforcing] Enhancing North–South, South–South [and triangular] cooperation, including city to city twinning arrangements, with the aim of promoting technology development taking into account endogenous technologies [of developing [countries][country Parties]] and prioritizing technologies for mitigation and adaptation [towards a goal of bringing down costs and increasing the] that [might] have not only [high costs but also high] potential for GHG mitigation and/or increas[e]ing resilience to the [negative] adverse impacts of climate change;
- (b) Providing opportunities for [all] [participation [by developing country]] [Parties] in joint R&D programmes[, as appropriate] for specific technologies and joint ventures to accelerate deployment, diffusion and effective transfer of technologies [from developed country Parties and other developed Parties included in Annex II of the Convention to developing country Parties] [from developed to developing country Parties], particularly technologies for adaptation [for SIDS,] [small island developing countries, LCDs and Africa ] [for low lying and other small island countries, countries with low-lying coastal, arid and semi-arid areas or areas liable to floods, drought and desertification, and developing countries with fragile mountainous ecosystems are particularly vulnerable to the adverse effects of climate change.] [consistent with the language of the Bali Action Plan and the Convention] [, in the absence of win-win solutions and market intervention].

*[Measures to address intellectual property rights]*

33. [Option 1]

Technology development, diffusion and transfer [shall] be promoted by operating the intellectual property regime. [This process shall also make use of the flexibilities in the IPR regime to][in a manner that encourages development of climate-friendly technologies and simultaneously] [such as compulsory licensing to] facilitates [the][their] demonstration, diffusion and transfer to developing countries. Buy down the cost of technologies to provide the:

- (a) Full cost for LDCs; and
- (b) Partial cost for other developing countries taking into account the ability to pay]

*Alternative to paragraph 33:*

[Parties shall cooperate to develop and deploy patent sharing and/or intellectual property free renewable energy and energy efficiency technologies.]

34. [Option 2]

Specific and urgent measures [shall] [should] be [instituted in [a] relevant forum[s]][established] [and mechanisms developed] to remove barriers to development and transfer of technologies from [developed][the developed Parties that have commitments under the Convention and the other developed Parties in a position to transfer environmentally sound technologies] to developing country Parties arising from the intellectual property rights (IPR) protection, [including][in particular]:

- (a) [All necessary steps shall be immediately taken in all relevant fora to [mandatorily exclude from patenting] [revoke all existing patents on essential/urgent] [implement compulsory licensing for] [specific] [climate-friendly] [environmentally safe and sound] technologies [in developing countries] [held by Annex II Parties which can be used to adapt to or mitigate climate change][, including those developed through funding by governments or international agencies];]

- (b) [[Pooling and sharing publicly funded technologies and making the technologies available in the public domain at an affordable price] [[Creation of a “Global Technology Pool for Climate Change”] [that promotes] [sharing] [of] [and ensures access to] technologies that can be used to adapt to or mitigate climate change and associated know-how [and trade secrets] to developing countries [including on non-exclusive royalty-free terms] [at an affordable price] [and on terms and conditions that promotes access for developing countries] in order to provide better information service and reduce transaction costs;]]
- (c) [Use to the full flexibilities contained in the Trade Related Aspects of Intellectual Property Rights (TRIPS) including Compulsory licensing to access intellectual property protected technologies, taking into account the example set by decisions in other relevant international forums relating to IPRs, such as the Doha Declaration on the TRIPs Agreement and Public Health;]
- (d) [Parties agree that nothing in any international agreement on intellectual property shall be interpreted or implemented in a manner that limits or prevents any Party from taking any measures to address adaptation or mitigation of climate change, in particular the development and transfer of, and access to technologies; ]
- (e) Adoption of a Declaration on IPRs and Environmentally Sound Technologies in relevant fora to, inter alia, reaffirm the flexibilities in the TRIPS Agreement and enhance the enabling environment for implementing these flexibilities.
- (f) [Preferential pricing] [Differential pricing between developed and developing countries].
- (g) Reviewing all existing relevant IPR regulations in order to provide certain information to remove the barriers and constraints that GHG mitigation technologies are subject to.
- (h) Promoting innovative IPR sharing arrangements for joint development of environmentally sound technologies.
- (i) Limited/reduced time patents on climate friendly technologies.
- (j) [Genetic resources, including germplasms of plant and animal species and varieties that are essential for adaptation in agriculture, shall not be patented by multinational or any other corporations.] [Biological resources including microorganisms, plant and animal species and varieties, and parts thereof that are used for adaptation and mitigation of climate change shall not be patented.]]

35. [Option 3

[LDCs][Countries vulnerable to the adverse effects of climate change] should be exempted from patent protection of climate-related technologies for adaptation and mitigation, as required for capacity-building and development needs.]

36. [Option 4

The Executive Body on Technology (EBT) should establish a committee, an advisory panel, or designate some other body, to proactively address patents and related intellectual property issues to ensure both increased innovation and increased access both for mitigation and adaptation technologies. Such a committee/panel should:

- (a) Actively engage enterprises and institutions in both developed and developing countries;

- (b) Develop a clear framework for evaluating and determining when intellectual property becomes a barrier to international technology research, development, deployment, diffusion and transfer and provide options for corrective action;
- (c) Make recommendations back to the UNFCCC COP or COP/MOP on barriers that may require further actions. ]

*[Incentive mechanism[s] for technology transfer][Cooperative technology deployment]*

37. [The Annex I countries shall institute incentives at the national level notably tax exemption and subsidies for the owner of patented technology with a view to promoting transfer and diffusion of the environmentally sound technologies to the developing countries;]

38. [[An incentive][The existing] [mechanism][s] [for technology transfer] [for enhanced cooperative action on technology development, deployment, transfer and diffusion] for mitigation and adaptation via projects/programmes that stimulate accelerated diffusion and transfer of existing and new environmentally safe and sound technologies to developing [countries] [country Parties], in particular a vulnerably countries [shall][should] be [strengthened] [established] [offered] in accordance with Article 4, paragraph 9.]

39. [For the purpose of [meeting its quantified emission limitation and reduction commitments] [meeting its commitments] and requirements for monitoring, reporting and verification, as appropriate, [a Party] [any Party included in Annex II] may transfer to, or acquire from, [other Parties] [any other such Party] emission reduction units resulting from projects [and programmes that accelerate the diffusion or transfer of environmentally sound technologies] [aimed at reducing anthropogenic emissions by sources or enhancing anthropogenic removals by sinks of greenhouse gases in any sector of the economy], provided that:

- (a) Host Parties establish technology targets or objectives;
- (b) [Voluntary participation] [Any such project] is approved by [each Party][the Parties] involved;
- (c) Any such project results in [measurable, reportable and verifiable] reductions of GHG emissions by sources or enhancements of removals by sinks [that is additional to any that would otherwise occur];
- (d) The project contributes to the achievement of the technology targets and objectives of the [host] Party in receipt of that technology;
- (e) The [host] Party [providing the technology shall be] [has] allocated assigned amount units or environmentally sound technology rewards (ESTRs) [for] [to] the project or programme, proportionate to volume of emissions removed;
- (f) The project/programme is registered under the Convention;
- (g) Participants in the ESTR mechanism may involve private and public companies;
- (h) It does not acquire any emission reduction units if it is not in compliance with its obligations; and
- (i) The acquisition of emission reduction units shall be supplemental to domestic actions for the purposes of meeting commitments.]



40. [Parties shall promote the accelerated penetration of cost-effective technologies in non Annex-I countries through the provision of financial support as appropriate, such as concessional loans and risk guarantees, for the large-scale dissemination of these technologies.]

*[Voluntary agreements][Partnerships]*

41. [Focused voluntary technology oriented agreements, including on partnerships within and outside the Convention and engaging the private sector and civil society organizations and local and subnational governments [shall][should] be [recognized][encouraged], including in accordance with Article 11.5 of the Convention. Such agreements could include cooperative R&D and large-scale demonstration projects, technology deployment projects, cooperation on specific sectors or gases, and cooperation on climate observation and warning systems for enhancing resilience.] [The contribution to enhanced action on RD&D through voluntary agreements on research, development and demonstration of key mitigation or adaptation technologies, shall be recognized under the Convention. Such agreements shall involve Parties to the Convention, and may include partnerships with the private sector, academia and civil society.]

*Technology information*

*Move the section on Technology information before section on Voluntary agreements.*

42. [Technological information transfer agreement/multiple agreements to facilitate the spread of environment friendly products [and a healthy and reliable agricultural production system should be established].]

43. [The technology mechanism under the Convention can also include a] [A] technology information platform, based on existing platforms, [should be developed and be continuously updated to collect information] on sector-specific technologies and best practices [on publicly and privately held technologies, [including on IPRs and licensing], costs, abatement potentials, barriers and manufacturers of technologies.] [The existing technology information platforms should be strengthened and linked together.]

44. [The technology mechanism will also develop a][A] global database including ‘[green production][low-emission]’ technologies and best practices for mitigation and adaptation to be continuously updated [should be developed through the technology information clearing house (TT:CLEAR).]

*[Development and transfer of technologies for adaptation]*

45. Development and transfer of technologies for adaptation should be enhanced through, *inter alia*:

- (a) For existing technologies for adaptation,
  - (i) Undertake an inventory of existing adaptation technologies in developing countries, including its state of current production;
  - (ii) Promote wide dissemination of existing adaptation technologies within similar regions;
  - (iii) Strengthen institutional and technical capacity of research and academic institutions, including re-orienting research programmes;
- (b) For future technologies for adaptation
  - (i) Stimulate and promote research, development and production of future adaptation technologies;

- (ii) Encourage and promote south to south technology development and cooperation;
- (iii) Promote wide diffusion of emerging adaptation technologies in similar climates; and
- (iv) Promote cooperation on research and development activities among developing countries.]

### 3. Institutional arrangements, including funds

*[Note: Parties proposed several options for the creation or strengthening of institutional arrangements under the Convention for enhancing action on technology. In proposing these arrangements, Parties in some cases also proposed funds and/or implementation aspects. Proposals on funds for technology are reflected in paragraph 175 in FCCC/AWGLCA/2009/INF.1 and proposals on implementation aspects of enhanced action on technology are reflected in paragraphs 19– 31 above (181–195 in FCCC/AWGLCA/2009/INF.1).]*

46. [Institutional arrangements for] enhanced cooperative action on technology [shall][should][include]

[Option 1

[Strengthen cooperation] [Make efficient use of the current institutional arrangements] through a range of institutions.

[An enhanced advisory capacity or role for] [and further efforts by] the Expert Group on Technology Transfer (EGTT) [acting in accordance with decision 4/CP.7 and serving as an advisory body to] [with the role of advisory centre at UNFCCC subsidiary bodies for development and transfer of technologies, and perform the following functions:] [to all bodies of the Convention] [the SBI, and] [the SBSTA] [and SBI] with appropriate improvements. The EGTT shall:

- (a) Provide advice and recommendations to the COP on the overall implementation of technology action under the Convention;
- (b) Elaborate a technology action plan as a starting point of its work;
- (c) Guide and supervise the disbursement of a multilateral climate technology fund;
- (d) Promote communication and information/knowledge sharing;
- (e) Engage the private sector and encouraging cooperative partnership between governments, research intuitions, including cities, and industries, recognizing a wide variety of processes, mechanisms and organizations outside the UNFCCC and the critical role of private-sector investment, capacity and expertise as well as the role of public research institutions;]
- (f) Seek cooperation and coordination with relevant international technology initiatives and organizations, particularly with respect to the development of technology road maps, cooperative actions on research and development of technology, options for financing technology deployment, diffusion and transfer, and advice on issues related to IPR;
- (g) Stimulate the establishment of facilitative mechanisms to leverage private sector financing to meet developing countries' needs;
- (h) Encouraging and strengthening collaborative partnership arrangements with relevant existing and emerging national and international public and private sector institutions

and initiatives, including academia, the research community, government, business and other stakeholders;

- (i) Develop special reviews on existing technologies, including information on estimated cost, risks, benefits and limitations, as well as the required infrastructure, human resources and diffusion potential, taking into account the circumstances of the host Party;
- (j) Elaborate suggestions on the implementation of the most appropriate financial scheme for a given technology deployment in a given country, including assessment of local capability in production of its components and their servicing;
- (k) Elaborate regulatory documents, terms and criteria and guidance, and preparation of the respective decisions of the Parties;
- (l) Monitor and assess the performance and progress, using performance indicators, and report to the COP.

[The membership of the EGTT shall be expanded] [The EGTT shall establish panels] to encompass business, research community and other relevant expert organizations, including the financial community, with responsibility for, inter alia:

- (m) Provision of relevant technical and other expert advice relating to the process of technology development, deployment and diffusion;
- (n) Undertaking technology action plans and road maps;
- (o) Provide advice as requested on TNAs, technology development plans or low emission development strategies.]

[[Option 2<sup>4</sup>

an executive body on technology, as a subsidiary body of the Convention, to enhance the implementation of the Convention by enhancing action on technology development and transfer to support action on mitigation and adaptation. The executive body shall, inter alia:

- (a) Provide advice and recommendations to the COP on the overall implementation of technology action under the Convention;
- (b) Elaborate a technology action plan as a starting point of its work;
- (c) Guide and supervise the disbursement of a multilateral climate technology fund [according to eligibility criteria such as Parties' level of development as well as their emissions reduction, limitation and adaptation potentials and their absorption capacities (human capital, depth of domestic market etc.)].
- (d) Promote communication and information/knowledge sharing; and policy dialogue;
- (e) Monitor and assess the performance and progress, using performance indicators, and report to the COP;
- (f) Identifying areas of cooperation with the private sector and making recommendations to the COP for action;
- (g) Contribute to the measuring, reporting and verifying of both the actions and the support for the actions;

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<sup>4</sup> This proposal is presented in connection with proposals on funds reflected in paragraph 49, below and proposals on implementation aspects reflected in paragraphs 19– 22 above (181–183 in FCCC/AWGLCA/2009/INF.1).

- (h) Advise on promoting technology transfer and diffusion in all relevant sectors, especially carbon capture and storage technology;
- (i) Identify best practices and best available technologies from developed countries and technologies that will be available in the future;
- (j) Develop special reviews on existing technologies, including information on estimated cost, risks, benefits and limitations, as well as the required infrastructure, human resources and diffusion potential, taking into account the circumstances of the host Party;
- (k) Elaborate suggestions on the implementation of the most appropriate financial scheme for a given technology deployment in a given country, including assessment of local capability in production of its components and their servicing;
- (l) Elaborate regulatory documents, terms and criteria and guidance, and preparation of the respective decisions of the Parties.]

Under the guidance of the COP, this body would comprise and be supported by a strategic planning committee, technical panels, a verification group and a secretariat [accountable to the executive body].

The executive body on technology shall [comprise government representatives elected by the COP with balanced regional representation, who are experts on matters related to technology development and transfer, and be open to input from other experts.] [be open to all Parties. Members of the committee and panels shall be determined by the COP.] [A multilateral climate technology fund (MCTF) shall be established that will provide technology-related financial requirements as determined by the Executive Body under COP.]

Alternative to Option 2:

[Establish an Executive Body on Technology (EBT), as a subsidiary body of the Convention, in accordance with its Article 7.2 (i). The EBT shall be composed of government representatives, elected by the COP, with balanced regional representation, who are experts on matters of technology development and transfer. The EBT shall: (the following can be put in an Annex to the decision to establish the EBT, as terms of reference, organizational structure, functions, etc...)]

- (a) be guided by the following principles:
  - (i) operate under the authority and guidance of the Conference of the Parties;
  - (ii) achieve the accessibility, affordability, appropriateness, and adaptability of technologies required by developing country Parties for enhanced action on mitigation and adaptation;
  - (iii) achieve the removal of barriers for development, deployment, adoption, diffusion, and transfer of environmentally-sound technologies (ESTs);
  - (iv) ensure the provision of new and additional, adequate and predictable financing resources for development, demonstration, deployment, adoption, diffusion, and transfer of ESTs;
  - (v) support the development and enhancement of endogenous capacities and technologies of developing country Parties;
  - (vi) accelerate the penetration of cost effective technologies, including pilot projects, capacity-building and facilitating financing;

- (vii) promote win-win solutions and technologies that have great potential to minimize adverse impacts of climate change and the adverse impacts of response measure in developing countries Parties including economic diversification;
  - (viii) be action-oriented in the view to achieve cost effectiveness;
  - (ix) promote broader involvement of relevant stakeholders;
  - (x) promote public-private partnership.
- (b) have the following functions:
- (i) accelerate the development, demonstration, deployment, adoption, diffusion, and transfer of environmentally-sound technologies from developed country Parties and other developed Parties included in Annex II to the Convention, to developing country Parties, in order to avoid the lock-in effects of non-ESTs, and to promote sustainable development in developing country Parties;
  - (ii) provide access to technology for adaptation at national, sub-regional and regional levels, enabled by capacity-building, and the provision of new and additional, adequate and predictable financing resources to meet the costs of both integration of adaptation into the development process and stand-alone adaptation activities;
  - (iii) remove barriers to technology transfer and enhance means of facilitating this transfer, to promote urgent access to advanced ESTs while balancing rewards for innovators with the common good of humankind, including, inter alia, jointly-developed technology and sharing of intellectual property rights;
  - (iv) enhance enabling environments to facilitate access to technology, including through financing environments that leverages private sector financial resources, including policy dialogues, and involvement in development, demonstration, deployment, adoption, diffusion, and transfer of environmentally-sound technologies (ESTs);
  - (v) build on existing activities within the Convention, including the work of the enhanced Expert Group on Technology Transfer (EGTT), to promote coherence through the integration of ongoing activities related to development and transfer of technologies;
  - (vi) provide the means for the full implementation of Convention commitments on development, deployment, adoption, diffusion, and transfer of environmentally-sound technologies (ESTs) , and related financing and capacity-building;
  - (vii) develop strategy and technology action plans and monitor and verify the implementation of the specific operational policies, guidelines and administrative arrangements, including the disbursement of resources, for the purpose of achieving the objectives of the multilateral technology fund taking into account the cost effectiveness of the proposed activities as well as the potential for their replicability;
  - (viii) coordinate action by different stakeholders at international, regional and national levels;

- (ix) assess the performance of development and transfer of ESTs in terms of speed, range and size of the technological flow.
- (c) be comprised of and supported by:
  - (i) A Strategic Planning Committee to:
    - develop strategy;
    - provide regular guidance;
    - assess and elaborate technology-related matters;
    - continuously evaluate progress, including financial and technological flows and range and effectiveness of technologies transferred;
    - develop updates for the Technology Action Plan (TAP), as described below, at regular intervals;
    - perform any other functions to be assigned to it by the EBT;
    - capacity-building.
  - (ii) Technical Panels to generate and compile current expert information related to, inter alia,
    - policies and measures;
    - intellectual property cooperation, sharing and partnership;
    - sectoral, cross-sectoral and cross-cutting cooperation;
    - assessment, monitoring and compliance related matters;
    - dissemination of knowledge;
    - documenting, scaling up and diffusion of indigenous adaptation technologies which already exist in developing countries.
  - (iii) A Verification Group to put in place a measurement, reporting and verification system for compliance with the provision of financing and the development, demonstration, deployment, adoption, diffusion, and transfer of environmentally-sound technologies by Annex I Parties to developing countries under the mechanism, and the overall compliance with financing and technology commitments under the Convention, including the MRV requirements under the Bali Action Plan.
  - (iv) A Secretariat to:
    - support and facilitate the activities of the Executive Body of Technology;
    - compile and prepare a final report on the financial and technological contributions made and reported by Parties to the technology mechanism, including the overall MRV requirements under the Bali Action Plan.

- (d) Develop a Technology Action Plan (TAP) to serve as a starting point for the work of the Executive Body.
  - (i) It will include specific actions and timelines for the first three years, and will be updated for successive three-year periods.
  - (ii) To realize the full potential of technology, the TAP shall support all stages of the technology cycle, including research, development, demonstration, diffusion, and transfer.
  - (iii) The TAP will define specific policies, actions and funding requirements for all relevant technologies under the following classifications: public domain technologies, patented technologies and know-how, future technologies.
- (e) the establishment of national and regional technology centers of excellence to reinforce north-south, south-south and triangular cooperation, including joint research and development (details can be annexed to the legal/agreed outcome).

An indicative list of activities and costs eligible for support under the EBT is attached as an Annex in paragraph 52 below (the Annex will consist of the indicative list of activities and costs eligible for support by the mechanism contained in the G77 and China submission on a Technology mechanism under the COP)].

[Option 3<sup>5</sup>

[a technology committee [to advise] the COP in technology policy issues. [The committee should be serviced by a strengthened professional secretariat and advised by a technology panel comprising experts nominated by Parties.] [The functions of the technology committee include][a technology panel shall have the following functions]:

- (a) Identifying areas of cooperation with the private sector and making recommendations to the COP for action;
- (b) [Reviewing and propose [and deciding] on technology investments];
- (c) [Reviewing [and approving] technology funding requests];
- (d) [Reviewing progress of implementation of the technology action programme];
- (e) [Approving procedures and modalities for technology cooperation with the private sector.];
- (f) Identify and promote best practices and best available technologies;
- (g) Identify appropriate ways for promoting transfer of existing best available technologies and those that will be available in the short, medium and future terms;
- (h) Provide guidance and support to developing country Parties in producing technology needs assessments as part of their low carbon development strategies;
- (i) Gather and, where necessary, produce or commission global technology roadmaps;
- (j) Assist coordinating mechanism with assessment of NAMAs and other relevant bodies.]

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<sup>5</sup> This proposal is presented in connection with proposals on funds reflected in paragraph 49, below and proposals on implementation aspects reflected in paragraph 19– 22 above (181–183 in FCCC/AWGLCA/2009/INF.1).

## [Option 4

a new body on technology transfer and financing [under the Convention] to enhance the implementation of technology transfer mechanisms as well as the associated enabling activities such as capacity-building, technical training, and R&D cooperation, including those activities identified in TNAs, NAMAs and NAPAs. The new body on technology transfer and financing should:

- (a) Coordinate the existing financing mechanisms, either market or non-market, [to be established];
- (b) Contribute to the measuring, reporting and verifying of both the actions and the support for the actions;
- (c) Facilitate links for accessing to funds and should reduce diversification among existing sources of funds within the Convention;
- (d) Articulate technology transfer and financing mechanisms under the Convention with other United Nations organizations, multilateral financial institutions established under bilateral or multilateral development programs and other relevant international forums not directly related to climate change, with the assistance of technical panels to be created.]

*Insert a new paragraph which integrates key elements of current options 2, 3, 4 and 5.*

## [Option 5

involvement of private entities and/or relevant international organizations, at national and/or sectoral level, through, inter alia, the enhancement of public-private partnership and the provision of advisory functions by experts in public and/or private sectors. For enhancing this cooperation, an [advisory group] for sectoral technology cooperation to support the implementation of NAMAs by removing obstacles to and promoting technology transfer and diffusion in all relevant sectors.

The advisory group for sectoral technology cooperation should, inter alia:

- (a) Identify best practices and best available technologies from developed countries and technologies that will be available in the future;
- (b) Identify appropriate ways for promoting transfer of existing best available technologies through analysing emission reduction potentials and setting indicators;
- (c) Advise on promoting technology transfer and diffusion in all relevant sectors;
- (d) Periodically report to the COP on its activities.]

## [Option 6

a new technology leveraging service which could form part of a broader facilitation platform should be created to provide an interactive facilitation service for actions identified through low emission development strategies and/or TNA/NAMA/NAPA processes. This service is to be provided to developing countries and would, on a voluntary basis, assess potential actions, assist in the development of rigorous projects proposals and assist in matching with the most appropriate form of investment support, particularly with a view to leveraging private sector funding. This service would work closely with relevant international financing institutions, multilateral development banks and the private sector. ]

## [Option 7

A Technology Development and Transfer Facility is hereby established.



The purpose of the Technology Development and Transfer Facility is to assist developing country Parties to identify and help facilitate the transfer of low greenhouse gas emitting technologies, particularly renewable energy and energy efficiency technologies, to assist in the undertaking of national appropriate mitigation actions. The Facility shall also assist particularly vulnerable developing countries to identify and help facilitate the transfer of appropriate adaptation technologies.

The Technology Development and Transfer Facility shall be subject to the authority and guidance of the COP (or the Conference of the Parties serving as the assembly of Parties) and be supervised by a Board.

The constituency of the Board shall be determined by the COP (or Conference of Parties serving as the assembly of Parties) and be guided by the principle of equitable geographical representation.

The Technology Development and Transfer Facility shall regularly report to the COP (or Conference of Parties serving as the assembly of Parties).

Advice shall be provided to the Technology Development and Transfer Facility Board by the Expert Group on Technology Transfer.]

*Proposal to consolidate paragraph 45 (196 in FCCC/AWGLCA/2009/INF.1) with paragraphs 174 and 175 in FCCC/AWGLCA/2009/INF.1 by using the following alternative:*

*Alternative to paragraph 45 (196 in FCCC/AWGLCA/2009/INF.1) and paragraphs 174 and 175 in FCCC/AWGLCA/2009/INF.1<sup>6</sup>:*

[Institutional arrangements for enhancing the implementation of Article 11 of the Convention, through finance, technology and capacity-building, shall include:

The creation of a Financial and Technology Mechanism meant to ensure the full, effective, and sustained implementation of the Convention, in relation to implementation of commitments for the provision of financial resources. This is mandated under Articles 4.3, 4.4, 4.5, 4.8 and 4.9 of the Convention in accordance with Article 11, defining the financial mechanism under the Convention.

The Financial and Technology Mechanism shall address all aspects of cooperation on technology research, development, diffusion, and transfer in accordance with Articles 4.1(c), 4.3, 4.5 and other relevant articles of the Convention, in order to enable mitigation and adaptation under the relevant paragraphs of decision 1/CP.13.

The basic architecture of the Financial and Technology Mechanism under the Convention will comprise two pillars, one on adaptation and the other on mitigation.

An Executive Body on Finance and Technology for Adaptation (EBFTA), accountable to the COP, shall be established. The EBFTA shall have, inter alia, the following functions:

- (a) The EBFTA shall organize, coordinate, monitor and evaluate the implementation of the comprehensive framework for adaptation, including the enabling means of financing, technology and capacity-building.
- (b) The EBFTA will guide and supervise the disbursement of the Adaptation Fund to be created under the Convention. [Further provisions on the Adaptation Fund to be inserted.]
- (c) The EBFTA shall coordinate disbursements from the Adaptation Fund according to the needs as indicated in national plans for adaptation submitted by developing countries to the EBFTA.

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<sup>6</sup> This text is presented in both the finance section and the technology section in response to a request by Argentina.

- (d) Financial and technical support should be available upon request by developing countries to the EBFTA for the elaboration of national plans for adaptation.
- (e) The EBFTA shall manage a certification system for receiving financial resources in compliance with the financial commitments of developed country Parties under Article 4.3 of the Convention.
- (f) The EBFTA shall articulate technology transfer and financing mechanisms under the Convention with other United Nations organizations, multilateral financial institutions established under bilateral or multilateral development programs and other relevant international forums not directly related to climate change, with the assistance of technical panels to be created.

The EBFTA will be supported by four technical panels on Research and Development, Capacity-building, Transfer of Technologies for Adaptation, and Observation systems and information management. The technical panels shall comprise government representatives elected by the COP with balanced regional representation, who are experts on matters related to each of the technical panels, and be open to input from other experts, in order to ensure transparent and efficient governance.

An Executive Body on Finance and Technology for Mitigation (EBFTM), accountable to the COP, shall be established. The EBFTM shall have, inter alia, the following functions:

- (a) The EBFTM shall organize, coordinate, monitor and evaluate the implementation of the comprehensive framework for mitigation, including the enabling means of financing, technology and capacity-building;
- (b) The EBFTM will govern a Mitigation Fund to be created under the Convention; [Further provisions on the Mitigation Fund to be inserted.]
- (c) The EBFTM shall coordinate disbursements from the Mitigation Fund according to the needs as indicated in NAMAs submitted by developing countries to the EBFTM;
- (d) Financial and technical support should be available upon request by developing countries to the EBFTM for the elaboration of NAMAs;
- (e) The EBFTM shall coordinate disbursements from the Mitigation Fund according to the needs for REDD+ activities as requested by developing countries to the EBFTM;
- (f) Financial and technical support should be available upon request by developing countries to the EBFTM for the preparation of REDD+ activities;
- (g) The EBFTM will also coordinate with regional development banks concessional loan arrangements for the private sector in developing countries for the implementation of specific mitigation activities;
- (h) The EBFTM shall manage a registry and certification system for receiving financial resources in compliance with the financial commitments of developed country Parties under Article 4.3 of the Convention;
- (i) The EBFTM shall articulate technology transfer and financing mechanisms under the Convention with other United Nations organizations, multilateral financial institutions established under bilateral or multilateral development programs and other relevant international forums not directly related to climate change, with the assistance of technical panels to be created.

The EBFTM will be supported by five technical panels on Research and Development, Capacity-building, Transfer of Technologies for Mitigation, REDD+, and Market Mechanisms. The technical panels shall comprise government representatives elected by the COP with balanced regional representation, who are experts on matters related to each of the technical panels, and be open to input from other experts.

#### *Technical Panels*

- (a) Both Technical Panels on Research and Development (TPRDA and TPRDM) shall, inter alia, coordinate multilateral technology research, development and demonstration programs and provide appropriate support to developing country Parties through North-South and South-South cooperation schemes, and promote joint ventures to accelerate deployment, diffusion and effective transfer of technologies;
- (b) Both Technical Panels on Capacity Building (TPCBA and TPCBM) shall organize, coordinate, monitor, evaluate and retrofit the implementation of capacity-building activities for adaptation and mitigation and the respective financing and technology development and transfer, in developing countries. TPCBs shall also provide information and views on the fulfillment of support commitments for capacity-building by developed countries. The TPCBs shall create mechanisms for sharing lessons learned, promote south-south cooperation as well as for the dissemination of successful capacity-building activities in developing countries;
- (c) Both Technical Panels on Transfer of Technologies (TPTTA and TPTTM) shall, inter alia, Provide advice and recommendations to the Executive Bodies on Finance and Technology on the overall implementation of technology; Promote communication and information/knowledge sharing; Monitor and assess the performance and progress of technological research, development, demonstration, diffusion, and deployment, using performance indicators, and report to the COP. In addition, this technical panel shall develop reviews on existing technologies, including information on estimated cost, risks, benefits and limitations, taking into account the circumstances of the host Party;
- (d) The Technical Panel on Observation Systems and Information Management (TPOSIM) shall, inter alia, organize, coordinate, monitor, evaluate and retrofit the implementation of systematic observation and information management (including data collection and archiving, analysis, modelling, downscaling and dissemination) activities for adaptation in developing countries. The TPOSIM shall create mechanisms for sharing lessons learned, promote south-south cooperation as well as for the dissemination of successful systematic observation and information management activities for adaptation in developing countries;
- (e) The Technical Panel on REDD+ (TPREDD+) shall, inter alia, determine reference levels methodologies, support enhancement of REDD project activities within countries, and other general methodological issues;
- (f) The Technical Panel on Market Mechanisms (TPMM) shall, inter alia, organize, coordinate, monitor, evaluate, and retrofit the implementation of mitigation activities in developing countries that are carried out under the market mechanisms. The TPMM will deal with issues such as country-specific sectoral baselines, additionality, monitoring and verification plans, registration of mitigation activities and actions, issuance of credits, etc.;
- (g) In addition, an MRV Panel to be created under the COP shall be in charge of establishing methodologies for MRV, measuring, reporting and verifying mitigation actions and the support received as required by paragraph 1.(b)(ii) of Decision 1/CP.13, and keeping

records of mitigation and adaptation activities implemented by developing countries with their own resources.

The UNFCCC Secretariat shall support and facilitate the activities of the EBFTA, EBFTM, and the technical panels.]

*National and regional technology innovation centres*

47. Existing [national and regional technology innovation centres] [Cooperative Technology Development Centres] and networks among Parties, particularly in developing countries [shall][should] be [established][and existing centres][strengthened][established and/or strengthened], as appropriate, [in major developing country regions around the world] to:

- (a) [Be a coordinating nodal centre to facilitate and enable the identification of one or more key technological products which have strong sustainable development and climate change benefits along with their projected price and performance targets, the development of such products, and the markets for these products, in partnership with appropriate public and private sector organizations.]
- (b) Promote [joint R&D activities] [in the context of South–South, North–South and triangular][and] cooperation [joint development of new technology][, which may include the sharing of IPRs];
- (c) [Promote the deployment, development and transfer of environmentally sound technologies for mitigation and adaptation [to developing country Parties]];
- (d) Stimulate capacity-building[, in particular for endogenous technologies];
- (e) Improve access to information on existing and new technologies;
- (f) [Promote the sharing of IPRs].]
- (g) Provide cooperative training and development facilities supported by public-private partnerships to develop and deploy renewable energy and energy efficiency technologies and environmentally sound adaptation technologies.
- (h) Provide training opportunities for participants from all countries to facilitate the development and transfer of renewable energy and energy efficiency technologies as well as other environmentally sound adaptation technologies.

48. [[Financial resources required to support] [Funding for the development of] [New and additional financing that is adequate, predictable and sustainable for] such [centres and networks][Cooperative Technology Development Centres][joint technology excellence centres] [shall][should] be provided by various sources including the [identified by the COP (or Conference of Parties serving as the assembly of Parties)] [Technology Window of the] [multilateral climate technology fund referred to in paragraph 175 in FCCC/AWGLCA/2009/INF.1, option 5, above] and [developed country] Parties through [an assessed contribution] [existing bilateral and multilateral cooperative programmes, partnerships and initiatives] [to enable entities in these countries to do research and development especially on adaptation as well as mitigation technologies].]

49. [Establish a Multilateral Climate Technology Fund (MCTF) to provide technology-related financial resources as determined by the EBT. The MCTF shall operate under the Conference of the Parties as part of the enhanced multilateral financial mechanism set up under the Convention: (also see Annex paragraph 51 below (x.4 in FCCC/AWGLCA/2009/INF.1))

50. Sources of Funds:
- (a) The MCTF shall be financed by assessed contributions from developed country Parties and other developed Parties included in Annex II of the Convention. Contributions to the mechanism shall be new and additional, and adequate and predictable, in accordance with Article 4.3 of the Convention;
  - (b) An agreed proportion of contributions by developed country Parties to bilateral and regional cooperation may be considered as contributions to the MCTF, provided that such cooperation is consistent with the policies and scope of the mechanism, and the guidance provided by the EBT;
  - (c) Specific sources including, parts of regular fiscal budget for research and development, fiscal revenue from taxation on carbon transaction and/or auction of emission permits in carbon market, as well as fiscal revenue from energy or environmental taxation in developed countries;
  - (d) Financing transfer to the MCTF shall be counted as measurable, reportable and verifiable commitments, both for mitigation and adaptation actions;
  - (e) Any financial resources for technology development and transfer channelled outside the framework of the financial mechanism, and therefore outside the authority and guidance of the COP, shall not be regarded as fulfilment of commitments by developed country Parties under Articles 4.3 and 4.5 of the Convention, or in fulfilment of the Bali Action Plan;
51. The MCTF will cover, inter alia,
- (a) eligible costs of activities approved by EBT;
  - (b) the administrative costs of the Executive Body, the Secretariat, and other bodies serving the EBT;
  - (c) costs associated with other specific decision of the Conference of the Parties related to technology development and transfer.
52. Annex I
- Activities eligible for support from the mechanism include, inter alia:
- (a) Promotion, facilitation and implementation of activities along the entire technology cycle to enable the accelerated adoption of ESTs;
  - (b) Support for research, development, manufacture, commercialization, deployment and diffusion of technologies for adaptation and mitigation in accordance with Decision 1/CP.13.
  - (c) Adaptation technologies to address the adverse effects of climate change and finance the removal of barriers to the large-scale transfer of technologies for adaptation;
  - (d) Technologies to address the adverse impact of response measures, and finance the removal of barriers to the large-scale transfer of technologies for reducing the adverse impact of response measures;
  - (e) Capacity-building to manage and generate technological change, enhance absorptive capacity, create enabling conditions in developing countries, inter alia, costs of:

- (i) Research, development and demonstration of new technologies;
  - (ii) Enhancing human and institutional capacity;
  - (iii) Guarantees on foreign direct investment for environmentally sound technologies.
- (f) Commercialization of new and emerging technologies, inter alia:
- (i) Venture capital, with public investment leveraging private capital markets for emerging technologies;
  - (ii) Research, development, and demonstration of new technologies, financed by venture capital and other sources;
  - (iii) Joint technology development
- (g) Creation of manufacturing facilities for EST, including low-GHG emission technologies, inter alia, costs of:
- (i) Compulsory licensing, cost associated with patents, designs, and royalties;
  - (ii) Conversion of existing manufacturing facilities or of establishing new facilities;
  - (iii) Research and development activities, including joint research, development, design, and demonstration;
  - (iv) Technology adaptation;
  - (v) Retraining and dissemination of know-how;
  - (vi) Operation; and
  - (vii) Monitoring and verification.
- (h) Procurement of low-GHG emission technologies, including software and hardware, inter alia:
- (i) Cost of premature modification or of replacement of existing equipment, as well as the cost of new equipment;
  - (ii) Cost of retraining and dissemination of know-how;
  - (iii) Cost of technical assistance for the design, installation, and stable operation of the technology;
  - (iv) Cost of fuel and other operational costs;
  - (v) Cost of technologies for fuel switching;
  - (vi) Cost of monitoring and verification.]

53. [A technology window, established in the new financial mechanism under the control of the COP, shall support implementation of concrete and practical technology activities elaborated.]

54. [An international renewable energy and energy efficiency bond mechanism is hereby established.

55. The purpose of the international renewable energy and energy efficiency bond mechanism is to provide developing country Parties with interest-free loans for financing the development and deployment of renewable energy and energy efficiency technologies.

56. Purchasers of renewable energy and energy efficiency bonds shall be provided interest payments through funding provided by the Technology Window of the Multilateral Fund on Climate Change.
57. All Parties shall ensure that interest payments made through the renewable energy and energy efficiency bond mechanism will be tax free within their domestic jurisdiction.
58. An international renewable energy and energy efficiency bond commission shall be established to facilitate:
- (a) the issuance of bonds;
  - (b) the issuance of renewable energy and energy efficiency loans;
  - (c) the issuance of interest payments.
59. The international renewable energy and energy efficiency bond commission shall report to the Technology Development and Transfer Facility Board and shall be assisted by the Expert Group on Technology Transfer.
60. The rules, modalities and guidelines for the operation of the international renewable energy and energy efficiency bond mechanism shall be agreed upon by the COP (or the Conference of Parties serving as the assembly of Parties).
61. Each Party, to the extent feasible, shall also develop a system of national renewable energy and energy efficiency bonds to complement the international system.]

Annex VI**Capacity-building**

This text reflects the consolidation efforts undertaken by the facilitator of the informal group on technology transfer and capacity-building on paragraphs 199–201 (pages 196–199) of the revised negotiating text (FCCC/AWGLCA/2009/INF.1) following the discussion and comments provided by the Parties during the informal meeting of the AWG-LCA held in Bonn, Germany, in August 2009.

In line with the approach agreed by Parties, parts of the text referring to similar concepts were consolidated and reordered while retaining the original language contained within the revised negotiating text.

Subheadings have been added by the facilitator in the consolidated text to improve its readability and mark clusters containing similar concepts. These subheadings are not intended as an introduction of a new text by the facilitator or a specific suggestion on addressing the issue of capacity-building. The subheadings will be removed from the text at a later stage if Parties so decide.

Paragraphs have been renumbered, starting from 1.

Paragraphs can be traced to their origin by using the explanatory table contained in annex VI to document FCCC/AWGLCA/2009/INF.2/Add.1, which also provides the rationale for the consolidation.

In this annex cross-references refer back to the revised negotiating text (FCCC/AWGLCA/2009/INF.1).

Structural proposal:

*Paragraph on financial resources for capacity-building support should be moved to the chapter on finance.*

1. Principles

1. Parties should cooperate to address the capacity needs of developing countries taking into account the following guiding principles:
  - (a) For LDCs capacity-building activities will be undertaken in the context of Article 4.9 of the Convention. This will ensure that there is capacity to utilize effectively the support given to this group to adapt to the impacts and participate in mitigation actions;
  - (b) Capacity-building should be:
    - (i) a continuous, progressive and iterative process;
    - (ii) country driven and consistent with national priorities and circumstances;
    - (iii) context specific and tailored to specific needs;
    - (iv) built on existing institutions and making use of local and indigenous knowledge;
    - (v) cross cutting and integrated into development planning and implementation;
    - (vi) participatory, with the engagement of a broad range of stakeholders;
    - (vii) an integral part of enhanced action on adaptation and mitigation.



## 2. Scope of capacity-building support

2. [International cooperation [shall][should] be enhanced to support the capacities of developing country Parties to implement mitigation and adaptation [capacity-building] actions, including, inter alia:
- (a) [[Creation] [strengthening] of enabling environments at national, [subnational and local] level [for enhanced action on adaptation and as appropriate mitigation], including [the establishment, where necessary, of appropriate] policy and legal and regulatory frameworks;]
  - (c) [Institutional strengthening through [the establishment of national coordinating bodies or enhancement of those bodies, where they exist, and] strengthening capacity of national focal points, [national coordinating processes] [and stakeholders;]]
  - (d) [Capacity-building for the preparation, implementation and follow-up of [NAPAs] [National Adaptation Plans], other national adaptation plans/strategies, national communications, TNAs for adaptation and mitigation including under NAMAs and [NAPAs] [National Adaptation Plans], and the readiness and implementation phase for REDD and REDD-plus activities and the carbon capture and storage project activities;]
  - (e) [Enhancement of capacity to plan, prepare and implement relevant mitigation and adaptation actions;]
  - (f) [Capacity-building for monitoring, reporting and verification of NAMAs, [[including][and] REDD-plus actions]], [Enhancement of capacities to monitor and report on climate change actions, including for preparation of national communications], national greenhouse gas inventories and carbon capture and storage project activities;
  - (g) [Capacity-building needs identified in national communications, national adaptation plans, NAMAs, national REDD-plus plans, national technology road maps and carbon capture and storage project activities;]
  - (h) Capacity-building needs specific for urban areas;
  - (i) Promotion of education, training and public awareness, with special focus on youth, women and indigenous peoples;
  - (j) Promotion of the gathering and exchange of information related to climate change impacts on marine ecosystems, communities, fisheries and other industries; emergency preparedness, monitoring and forecasting of climate change and ocean variability; and improvement of public awareness of early warning system capacity;
  - (k) Provision of technical assistance for building developing countries' capacity to 'ready' themselves for accessing larger pools of domestic and international financing];
  - (l) Building, development, strengthening, enhancement and improvement of existing scientific and technical skills, capabilities and institutions, particularly in developing countries, to enable them to assess, adapt, manage and develop technologies that have:
    - (i) great potential to reduce GHG emissions;

- (ii) win-win solutions including carbon capture and storage technologies;
- (iii) great potential to minimize the adverse impacts of climate change and the adverse impact of response measures in developing country parties including economic diversification;
- (m) Capacity-building in technology R&D, including innovation for adapting available technologies to national endowments and circumstance, and in actual deployment and servicing of technologies at operational levels;
- (n) Strengthening of national institutions to address the emerging capacity-building needs, particularly those related to implementation of the provisions of the climate change regime.

3. [Developed countries shall support developing countries to formulate and implement strategies and action plans to implement learning-by-doing stand alone capacity-building projects/programmes and activities within the agreed framework under the Convention.]

### 3. Institutional arrangements

4. A specific capacity development and support mechanism shall be established [and supported by developed country Parties to cater for the specific capacity-building needs of developing county Parties, in particular LDCs, SIDS and African countries,] including training (subregional training of trainers), mentoring and learning-by-doing activities among other measures:

- (a) To empower relevant institutions at various levels [taking into account also the need for stand alone capacity development activities at various levels];
- (b) To enhance observation, research and knowledge management;
- (c) [To strengthen endogenous capacities;]
- (d) To strengthen communication, education and awareness-raising at all levels, especially at the local and community levels;
- (e) To strengthen and use regional networks of information and knowledge sharing[, including indigenous knowledge sharing;]
- (f) To share experiences, information and best practices of developing countries [regions including African, Asian and Latin American countries within AOSIS;]
- (g) To assess, strengthen and mobilize the capacities of existing relevant facilities and institutions [in LDCs, SIDS, Africa and other] developing countries;
- (h) [To strengthen and use data for systematic observation, early warning, modelling, disaster preparedness and capacity evaluation and monitoring;]
- (i) [To strengthen capacity for modelling and needs assessments related to adaptation, mitigation, capacities, financing and technologies;]

- (j) To develop tools, methods and technologies and support their application;
- (k) To encourage and strengthen participatory and integrated approaches in planning and decision-making, including the meaningful participation of [various non-governmental actors] [civil society];
- (l) [To strengthen the structural and institutional capacity for economic diversification].

5. Technical Panels on Capacity Building (TPCBA and TPCBM) shall organize, coordinate, monitor, evaluate and retrofit the implementation of capacity-building activities for adaptation and mitigation and the respective financing and technology development and transfer in developing countries. TPCBs shall also provide information and views on the fulfilment of support commitments for capacity-building by developed countries. The TPCBs shall create mechanisms for sharing lessons learned, promote South-South cooperation as well as for dissemination of successful capacity-building activities in developing countries.

#### 4. Measurement of capacity-building support and action

6.

##### Option 1

[Support for capacity-building activities shall be measured through the use of agreed and effective performance indicators [and in units to be established as part of the review of the implementation of the capacity-building framework adopted under decision 2/CP.7.], in order to ensure that the resources provided by developed country Parties are benefiting developing countries within the context of the agreed activities identified and undertaken through a bottom-up, national-driven process.]

##### Option 2

[To facilitate the monitoring and review of commitments under the Copenhagen Agreement, all Parties should report on progress made in enhancing the capacity to address climate change, and of support provided or received.]

#### 5. Provision of financial resources for capacity-building

7. [Financial and technological support [shall] [should] be provided in the context of Article 4.9 of the Convention in a transparent, expedited, direct access, sustainable and predictable manner under the overall guidance of the COP through

##### Option 1

a dedicated multilateral fund for capacity-building as referred to in paragraph 175, option 6.

##### Option 2

a new financial mechanism to support mitigation, adaptation, technology transfer and capacity-building action as referred to in paragraph 166 and paragraph 174, option 1.

Provision of capacity-building support to developing country Parties, along with delivery of financial support and technology transfer, shall be a legally binding obligation of developed country Parties, with consequences for non-compliance.]

Annex VII**Cross-cutting proposals related to structure and placement**

During the informal meeting of the AWG-LCA held in Bonn, Germany, in August 2009, the Chair summarized cross-cutting proposals related to structure and placement in the following manner:

- (a) Structural proposals:
  - (i) Restructure the text to distinguish common responsibilities of all Parties from differentiated responsibilities of different groups of Parties;
  - (ii) Add annexes to reflect commitments and actions by Parties;
  - (iii) Maintain the separation between responsibilities of developed and developing countries;
  - (iv) Organize provisions according to, and referring back to relevant Articles and provisions of the Convention.
- (b) Proposals related to placement:
  - (i) Consideration of means of implementation (finance, technology and capacity-building):
    - Integrate provisions related to means of implementation in the chapters on finance, technology and capacity-building;
    - Integrate provisions related to means of implementation in the chapters on finance, adaptation, mitigation and shared vision;
  - (ii) Move aspects related to financing and institutional arrangements to the respective chapters of the negotiating text;
  - (iii) Move aspects relating to the global goal and mid-term targets, including ranges of emission reductions, to the mitigation chapter;
  - (iv) Placement of objectives and guiding principles:
    - Reflect objectives, scope and guiding principles at the beginning of the chapter on mitigation and adaptation;
    - Move objectives and principles to the respective section in the shared vision chapter.
- (c) Proposals related to structure and placement in the mitigation chapter:
  - (i) Reflect overlaps, relationship, and coherence with the AWG-KP;
  - (ii) Treatment of measurability, reporting and verification of mitigation action and support:
    - Consider measurability, reporting and verification of mitigation actions as related to 1 (b) (i) and 1 (b) (ii), and REDD-plus in one chapter integrated with measurability, reporting and verification of support;

- Consider measurability, reporting and verification separately for actions under paragraphs 1 (b) (i) and 1 (b) (ii), and REDD-plus.

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