Introduction

The Bali Action Plan requires the Parties to address enhanced action on adaptation, including, inter alia, consideration of:

- Risk management and risk reduction strategies, including risk sharing and transfer mechanisms such as insurance (1(c)(ii))
- Disaster risk reduction and strategies and means to address loss and damage associated with climate change impacts in developing countries that are particularly vulnerable to the adverse effects of climate change (1(c)(iii))

The Bali Action Plan also requires Parties to address enhanced action on the provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation under paragraph 1(e).

The following proposal, which provides further detail on AOSIS's earlier call for an International Insurance Mechanism, is relevant to Bali Action Plan paragraphs 1(c)(i), 1(c)(ii), 1(c)(iii) and 1(c)(v) on adaptation, as well as paragraphs 1(e)(i), 1(e)(ii), 1(e)(iii), 1(e)(iv), 1(e)(v), and 1(e)(vi) on finance and investment.

Proposal

In the view of AOSIS, an essential part of the post-2012 agreement must be a new Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts in SIDS and other developing countries particularly vulnerable to the impacts of climate change.

This Multi-Window Mechanism would consist of three inter-dependent components:

1. Insurance Component
2. Rehabilitation/Compensatory Component
3. Risk Management Component

These three components play different and complementary roles and comprise necessary components of an integrated approach to risk reduction, risk transfer and risk management efforts. Taken together, the three components aim to enhance adaptive capacity.

- An Insurance Component is needed to help SIDS and other particularly vulnerable developing countries manage financial risk from increasingly frequent and severe extreme weather events. Many SIDS either cannot access insurance or find it increasingly difficult to afford commercial insurance to address impacts on national economies and require support in addressing the burden of increasing risks due to climate change.
- A Rehabilitation/Compensatory Component is needed to address the progressive negative impacts of climate change, such as sea level rise, increasing land and sea surface temperatures, and ocean acidification, which result in loss and damage. Even with financial risk management mechanisms in place and efforts to
reduce physical risks and exposure, some measure of loss and damage due to climate change impacts will be unavoidable and must be addressed.

- A **Risk Management Component** is needed to support and promote risk assessment and risk management tools and facilitate and inform the **Insurance Component** and **Rehabilitation/Compensatory Component**.

Support for the establishment and maintenance of such a Multi-Window Mechanism to Address Loss and Damage is appropriately viewed as adaptation assistance.

**On Guiding Principles:**

- **Principle of State Responsibility** - States have the responsibility to ensure that activities under their jurisdiction or control do not cause damage to the environment of other states or areas beyond national jurisdiction (Principle 21 of the Stockholm Declaration; Principle 2 of the Rio Declaration). Where there is a breach of this international obligation, there is a duty to cease and to make reparation.¹

- **Principle 13 of the Rio Declaration** – States shall cooperate in an expeditious and more determined manner to develop further international law regarding liability and compensation for adverse effects of environmental damage caused by activities within their jurisdiction or control to areas beyond their jurisdiction.

- **Polluter Pays Principle**

- **Common but differentiated responsibilities and respective capabilities**

- Parties should take **precautionary measures** to anticipate, prevent or minimize the causes of climate change and minimize its adverse effects

- **Principles of equity and intergenerational equity**

- **International solidarity**

**On Objectives**

- To institute a mechanism to reduce vulnerability and enhance adaptive capacity to climate risks in SIDS, LDCs and other developing countries particularly vulnerable to the adverse impacts of climate change.

**On Context²**

- SIDS and LDCs face enormous challenges in managing climate-related risk and in addressing loss and damage due to the impacts of climate change.³

- The impacts of climate change represent an additional burden these countries, which are already heavily impacted by extreme weather events as a result of their physical and economic vulnerability.

- Increasing sea surface temperatures and rising sea levels affect the frequency and intensity of extreme weather events (hurricanes, cyclones, typhoons, droughts, floods), and contribute to increasing loss and damage associated with these events.

- Many small islands within SIDS are a maximum of a few meters above sea level, and have a substantial portion of their population living by the coast in highly exposed areas.⁴ These characteristics limit the capacity of SIDS to adapt to the adverse effects

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⁴ FCCC/TP/2008/3, para. 112 (noting that low-lying SIDS such as the Maldives and Papua New Guinea have nearly 50-80% of their land area less than one meter above sea level) and para. 116 (further noting that in most SIDS, major cities or towns hosting strategic infrastructure such as airports, seaports, industrial and central business areas and government activities are located in coastal zones exposed to sea level rise).
of climate change. At the 1992 United Nations Conference on Environment and Development, SIDS were singled out as requiring special consideration.\(^5\)

- SIDS, LDCs and countries in Africa face serious difficulty in obtaining accessing cost-effective and appropriate risk sharing and risk transfer mechanisms. There is limited capacity to spread risk geographically; insurance markets are vulnerable to changes in the international markets; in many regions non-life insurance markets are underdeveloped; these countries lack the financial means to adapt to the adverse effects of climate change and the capacity to manage financial risks from the direct impacts of climate change.\(^6\)

- From 2000 to 2006 the annual number of climate-related disasters rose to 365 from an annual average of 195 in the period from 1987 to 1998 - an increase of 87 per cent. In the 1990s about three quarters of all disasters were triggered by weather-related events. More than 95 per cent of deaths caused by natural disasters occur in developing countries. Losses due to natural disasters are 20 times greater as a percentage of GDP in developing countries than in industrialized countries.\(^7\)

- From 1980-2003, insurance covered 4% of total costs of climate-related disasters in developing countries, compared with 40% in high income countries.

- Although loss and damage may be significantly reduced by risk reduction measures, resilience building and climate change adaptation, this still leaves a substantial degree of risk from climate-related hazards.

- Climate change affects a range of assets, both financial and non-financial.

- A portfolio of tools is needed to address climate risk.

On **Source of funds:**

- External support is needed, as the increasing climate change impacts represent an additional burden on developing countries from the effects of past developed country emissions.

- **Convention Adaptation Fund** - funding should come from Annex I Parties, preferably through the **Convention Adaptation Fund** proposed by AOSIS, which includes assessed contributions based on the level of countries’ GHG emissions, taking into account their respective levels of development and ability to pay as well as historical responsibilities, with
  - *greenhouse gas emissions* as a measure of responsibility and
  - *Gross Domestic Product* as a measure of capability.

- Funding could also come from the Kyoto Protocol Adaptation Fund.

- Additional contributions may come from bilateral and multilateral sources and other actors (donors, IGOs, NGOs).

- Substantial financial resources will be needed to support the Multi-Window Mechanism, commensurate with required and projected adaptation needs.

On **Structure:**

- The Multi-Window Mechanism would have three components:
  - Insurance Component
  - Rehabilitation/compensatory Component
  - Risk Management Component

- All three components are *inter-dependent* and needed as part of an integrated approach to the impacts of climate change.

\(^5\) FCC/TP/2008/9 para. 72.

\(^6\) See FCC/TP/2008/9 para. 46.

\(^7\) FCC/TP/2008/9 para. 41.
# Multi-Window Mechanism to Address Loss and Damage from Climate Change Impacts

## Multi-Window Mechanism Board

<table>
<thead>
<tr>
<th>1. Insurance Component</th>
<th>2. Rehabilitation / Compensatory Component</th>
<th>3. Risk Management Component</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>To address climate-related extreme weather events</strong> such as hurricanes, tropical storms, floods and droughts, which result in loss and damage</td>
<td><strong>To address progressive negative impacts</strong>, such as sea level rise, increasing sea and land temperatures and ocean acidification, that result in loss and damage (e.g., land loss, coral bleaching, impacts on potable water availability, reduction in fisheries, desertification, etc.)</td>
<td><strong>To promote</strong> risk assessment and risk management tools and strategies at all levels; to facilitate the implementation of risk reduction and risk management measures</td>
</tr>
<tr>
<td><strong>Triggers</strong> – e.g., might include precipitation, wind speed, storm surge</td>
<td><strong>Parameters</strong> – might include sea level rise, temperature increases, loss of land, damage to coral reefs, loss of fisheries, salinisation of aquifers, or use an all-risk parameter</td>
<td></td>
</tr>
</tbody>
</table>

### A. Technical Advisory Facility

**With respect to Insurance Component:**  
- Provides advice and guidance to countries on types of available instruments  
- Advises on best practices and innovative approaches for identified needs  
- Provides technical support for the establishment of appropriate risk sharing and risk transfer schemes as requested (e.g., risk pooling arrangements; indexed insurance mechanisms such as catastrophe bonds, weather derivatives; reinsurance schemes; public private partnerships etc.)

**With respect to Rehabilitation/Compensation Component:**  
- Works with countries to establish baseline parameters in local context  
- Verifies when parameter thresholds exceeded  
- Considers means to graduate parameters to reduce basis risk

**With respect to Risk Management Component:**  
- Provides advice to countries on risk management techniques in the context of climate change  
- Facilitates collection of weather data and analysis (e.g., that can support development of insurance tools)  
- Identifies hazards and provides support to risk assessments  
- Recommends appropriate investments in risk reduction  
- Assists in building capacity for managing risk and reducing risk exposure

### B. Financial Vehicle/Facility

**With respect to Insurance Component**  
- Enables/administers/supports risk sharing/risk transfer schemes as required/requested through start up financing, subsidization  
- Manages and invests reserves accumulated from assessed Annex I Party contributions, premiums/contributions from covered private and public sector institutions and from other donor sources

**With respect to Rehabilitation/Compensation Component**  
- Accumulates funds from  
  - assessed Annex I Party contributions, preferably through the proposed Convention Adaptation Fund based on GHG emissions (responsibility) and GDP (capacity)  
  - other donor sources  
- Pays out when parametric threshold crossed

**With respect to Risk Management Component**  
- Fund measures to support risk reduction and risk management measures  
  - e.g., data collection, hazard mapping, risk assessments

### C. Administration - UNFCCC Secretariat

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8 See FCCC/TP/2008/9, paras. 361-371 (on parametric all risk insurance).
On Institutional Arrangements:

- The Multi-Window Mechanism would be situated under the umbrella of the Convention and housed within the UNFCCC Secretariat.
- A Multi-Window Mechanism Board would provide oversight and have a transparent governance structure.
- Institutional arrangements would include technical, financial and administrative functions.
- A Technical Advisory Facility and a Financial Vehicle/Facility would provide support to all three components, providing different services to different components.
- The Technical Advisory Facility would provide advice and assistance, and receive input from the insurance and reinsurance sectors, the disaster risk reduction community, UN agencies and other organizations.
- The Financial Vehicle/Facility would manage funds held by the Multi-Window Mechanism. It would be created inside the UNFCCC, but could be housed in a financial institution outside the UNFCCC.
- The UNFCCC Secretariat would provide administrative support.

1. Insurance Component

The Insurance Component of the Multi-Window Mechanism would assist SIDS, LDCs and other developing countries particularly vulnerable to the impacts of climate change in better manage financial risks associated with increasingly frequent and severe climate-related extreme weather events, such as hurricanes, tropical storms, storm surge, floods and droughts. These events already result in significant loss or damage and many hazards will be caused or exacerbated by climate change. Thus climate change impacts create an additional burden on SIDS and other particularly vulnerable countries, as represented in the diagram below. In many cases these impacts now exceed or threaten to exceed countries' adaptive capacities.

Source: FCCC/TP/2008/9, para. 310.

Risk sharing and risk transfer mechanisms can reduce the vulnerability of developing country economies to these hazards. The Insurance Component of the Multi-Window Mechanism would facilitate the development and implementation of financial risk management tools tailored to the needs of countries that are particularly vulnerable to the impacts of climate change, in order to facilitate the establishment of affordable, sustainable and equitable risk sharing and risk transfer mechanisms.

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9 See FCCC/TP/2008/9, paras. 94-112, listing and describing types of hazard caused by climate change and dividing these into acute (windstorm, storm surge, flood, drought, fire, heatwave) and chronic (sea level rise, ocean acidity, changes in precipitation, melting glaciers and permafrost, temperature rise).
In many SIDS, insurance markets are undeveloped or almost non-existent; the scale, the physical infrastructure, data systems and financial infrastructure needed to support the engagement of the private insurance sector is lacking. In SIDS with more developed insurance markets, insurers respond to increasing climate-related risk by raising the cost of insurance premiums, or restricting or removing coverage – the end result is less coverage and a decrease in ability to recover from extreme events.

In the absence of tools to manage growing climate-related risk, SIDS face substantial challenges to their sustainable development from an inability to access credit for development and also an inability to speedily access capital in the wake of extreme weather events. In recognition that SIDS face an additional burden resulting from the impacts of climate change, an internationally-supported mechanism is needed to assist impacted Parties in exploring and establishing appropriate and cost-effective mechanisms to manage the increasing financial risk associated with climate-related hazards. The **Insurance Component** would leverage private and public sector funds to enhance adaptive capacity.

Greater access to conventional risk sharing and risk transfer instruments (such as risk pooling and assisted reinsurance schemes) and to innovative risk sharing and risk transfer instruments (including indexed-based mechanisms such as catastrophe bonds and weather derivatives), should assist SIDS in reducing the cost of insurance, in order to better equipped to manage the financial impacts of climate-related extreme events. Index-based approaches (e.g., using parametric triggers linked to wind speed or level of precipitation), may reduce transaction costs, information needs and typical challenges associated with insurance tools (moral hazard, adverse selection, etc.).

The improved availability of cost-effective new and innovative insurance tools can provide cost savings, enhance financial and social security, increase adaptive capacity, improve coordination between the public and private sectors in identifying, reducing and addressing climate-related risk, and support sustainable development.

The **Insurance Component** would work closely with the **Risk Management Component** to enhance for exposed sectors and infrastructure. Insurance tools, such as hazard mapping, can support risk reduction and risk management efforts. Similarly, improved risk management tools, including risk assessments and GIS mapping (supported by the **Risk Management Component**) can enable the expansion of private insurance markets and facilitate the development of innovative schemes. The **Insurance Component** could support risk reduction by creating incentives for the implementation of risk reduction measures.

A degree of international support is needed to ensure that risk sharing and risk transfer mechanisms not only reduce costs on vulnerable countries, but also lift the burden of climate risk that would otherwise remain with the countries that have contributed little to the GHG emissions that have caused this increase in risk.

**2. Rehabilitation/Compensatory Component**

The second **Rehabilitation/Compensatory Component** is needed to address the progressive negative impacts of climate change such as sea level rise, increasing sea and land temperatures and ocean acidification that result in loss and damage (e.g., permanent or extended loss of useful land, damage to coral reefs, damage to water tables, loss of fisheries, etc.).

Even with a range of new and innovative risk transfer mechanisms possible (through the **Insurance Component**), and risk reduction measures in place (through the support of the **Risk Management Component**), a measure of residual risk will remain. The UNFCCC Technical Paper on managing risk notes that “even with the successful development and deployment of existing and new risk-transfer mechanisms, the vulnerable would still be at risk from climate...
hazards. Owing to the increased interdependence of global economy and society, impacts in poor and vulnerable regions could cascade throughout the world. It would therefore be cost-effective as well as equitable for the international community to contribute to managing these risks. In this regard, the Technical Paper notes AOSIS’s earlier proposal for an international insurance pool “to be funded by developed countries to compensate small-island and low-lying developing countries for the otherwise uninsured loss and damage from slow-onset sea level rise” (emphases added).

The Technical Paper has identified ways these risks might be addressed through its proposed Scheme C. Scheme C is a long-term approach to these challenges through a Climate Change Risk Mechanism. The Technical Paper also acknowledges and commends an independent but similar proposal by Munich Climate Insurance Initiative (see para. 348 and Box 8).

The Rehabilitation/Compensatory Mechanism would address loss and damage from climate change risks that cannot be addressed under the Insurance Component or be minimized or eliminated through the Risk Management Mechanism and that exceed the adaptive capacity of particularly vulnerable countries.

Rehabilitation/Compensatory payments could be triggered by changes in parameters relative to baselines. Parameters could include:

- Sea level rise
- Sea surface temperature
- Air temperature
- Precipitation
- Windspeed
- Soil salinity
- Ocean acidity

Loss and damage addressed should include:

- economic loss
- property loss and damage
- loss of life
- environmental damage (e.g., coral reef damage, salt-water intrusion, loss of fisheries, ecosystem damage)

Baseline data could:

- rely on historical data where available (e.g., long-term averages of extreme event frequency or severity, precipitation)
- be established by Parties through risk assessments
- be based on data gathered by the Multi-Window Mechanism’s Technical Advisory Facility from objective sources

Assessment of claims and payouts could be:

- made by the Multi-Window Mechanism’s Financial Vehicle/Facility
- based on actual losses or on modeled impacts

Rehabilitation/Compensation would:

- cover a portion of impacts, to minimize the need for a case-by-case requirement that each impacted country establish a causal link between emissions and impacts, or
- cover all projected impacts, depending upon the level at which triggers are set and the level of agreed payouts

The Rehabilitation/Compensation Component is closely linked to the Risk Reduction Component, which would provide resources to ensure that reasonable risk reduction measures are taken in light of the assessed risk. The Risk Reduction Component would also provide support for the tools needed to assess climate risk. This interaction between the Multi-Window Mechanism components recognizes the role of particularly vulnerable

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10 FCCC/TP/2008/9 at 13.
11 Ibid.
12 Id. paras. 336–348.
developing countries in undertaking risk reduction efforts, as well as Convention obligations on the provision of funding to assist particularly vulnerable countries in meeting the costs of adaptation.

3. **Risk Management Component**

A **Risk Management Component** is the third integral component. This Component would provide advice and assistance to countries on risk management techniques, facilitate the provision of support for the collection of weather data and analysis, provide support to risk assessments, identify hazards, recommend appropriate investments in risk reduction and assist in building capacity to manage climate-related risk and reduce risk exposure.

The **Risk Management Component** would provide both technical and financial support to risk reduction efforts in connection with climate-related extreme weather events (e.g., retrofitting buildings to withstand greater windspeeds, integration of risk assessments into planning processes, upgrading infrastructure).

It would also facilitate consideration of ways to reduce risk from the impacts of progressive negative impacts of climate change that result in loss and damage, including sea level rise, increasing sea temperatures, increasing air temperatures and ocean acidification, which have impacts on coastal infrastructure, shorelines, coral reefs, etc). The **Risk Management Component** would work closely with the two other Components within the Multi-Window Mechanism.

Financial support for this component of the Multi-Window Mechanism would be drawn preferably from the **Convention Adaptation Fund** proposed by AOSIS. Funding could also come from the Adaptation Fund. Technical support could be contributed from a range of intergovernmental organisations, disaster management agencies and donor entities with relevant expertise.

**Further Remarks**

The UNFCCC Technical Paper on *Physical and socio-economic trends in climate-related risks and extreme events, and their implications for sustainable development* (FCCC/TP/2008/3) highlights the unique socio-economic and physical vulnerability of SIDS to climate risk. The above proposal will respond to this unique vulnerability.

Many elements of the **Multi-Window Mechanism to Address Loss and Damage** resonate with recommendations contained in the UNFCCC Technical Paper on *Mechanisms to manage financial risk from direct impacts of climate change in developing countries* (FCCC/TP/2008/9), and in particular Scheme C, paragraphs 336 and following for a Climate Risk Management Mechanism. Scheme C aims to provide a long-term approach at the global level and recognizes that support is needed from the international community where underlying risks may be uninsurable due to the high degree of hazard or the inability of the Parties at risk to pay an adequate premium. Elements of the Multi-Window Mechanism also resonate with the proposal made by **Munich Climate Insurance Initiative** (MCII), which is referenced in FCCC/TP/2008/9.

Each of these proposals recognize the pressing need to address the challenges faced by countries particularly vulnerable to the impacts of climate change in managing climate risk and the opportunities afforded by insurance tools and concepts in this context.

AOSIS looks forward to further focused discussions on this issue and the above proposals in order to address the urgent and immediate needs of SIDS, LDCs and other particularly vulnerable developing country Parties.