

## **Comments and suggestions from Major Group Science and Technology**

### **Explanation Note**

1. The present document is the pre-zero draft of the post-2015 framework for disaster risk reduction. It will serve as the basis for the open-ended informal consultative meetings which the Co-chairs of the Bureau of the Preparatory Committee for the Third United Nations World Conference on Disaster Risk Reduction, mandated by the first Preparatory Committee meeting held in Geneva on 14-15 July 2014, will carry out in September and October 2014. Based on such consultative meetings, the Co-Chairs by mid-October will prepare a Zero-Draft for the second Preparatory Committee meeting, scheduled in Geneva, Switzerland, on 17-18 November 2014.
2. The UN General Assembly Resolution A/RES/68/211 decided that the World Conference will result in a concise, focused, forward-looking and action-oriented outcome document.
3. The pre-zero took into consideration sources such as: the International Framework of Action for the International Decade for Natural Disaster Reduction (IDNDR) of 1989; the “Yokohama Strategy for a Safer World” of 1994; the International Strategy for Disaster Reduction of 1999; the Hyogo Framework for Action of 2005; the HFA Mid-Term Review; relevant General Assembly resolutions; the deliberations of the fourth session of the Global Platform for Disaster Risk Reduction of 2013; the compilation report on consultations on the post-2015 framework for disaster risk reduction (A/CONF.224/PC(I)/5); the suggested elements for the post-2015 framework for disaster risk reduction (A/CONF.224/PC(I)/6); the outcomes of the 2014 regional platforms for disaster reduction of Africa, Americas, Asia, Pacific, and the European ministerial meeting on disaster risk reduction (A/CONF.224/PC(I)/7, 8, 9, 11, 12); the statements of States and major groups at the first session of the Preparatory Committee for the Third United Nations World Conference on Disaster Risk Reduction; the proposal of the Open Working Group for Sustainable Development Goals; and the 2009 UNISDR Terminology on Disaster Risk Reduction; [Draft Articles adopted in 2014 by the United Nations International Law Commission Drafting Committee on first reading on “Protection of persons in the event of disasters” \(A/CN.4/L.831\).](#)

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Provisional name  
[Post-2015 framework for disaster risk reduction]

**A. Preamble**

1. The Hyogo Framework for Action (HFA) has provided critical guidance to reduce disaster risk and strengthen cooperation across stakeholders at local, national, regional and global levels. However, its implementation has also highlighted gaps in the formulation of goals and priorities for actions, in particular priority 4, and in the role recognized to stakeholders. Priorities 1,2,3 and 5, overlapping in some parts, were more directly actionable and specific than priority 4. This has brought to the fore the need, through a post-2015 framework for disaster risk reduction, to update and reorder the strategic goals and priorities, give the respective visibility to all levels, and to place emphasis on stakeholders and their role in advancing the priorities.

2. In particular, since the adoption of the HFA, and as reported in the HFA Monitor and in the consultations on the post-2015 framework for disaster risk reduction, countries in all regions have made gradual progress in strengthening their institutional, legislative and policy frameworks, in particular in early warning, and disaster preparedness for response. This has contributed to reducing the number of deaths, especially in the case of floods and tropical storms. There has also been significant progress in risk assessment, education, research and public awareness. Countries report increasing their investments in risk reduction, as well as developing risk-transfer mechanisms, such as insurance, index-based insurance for crop losses and hurricanes, marked disaster bonds, and family and community insurance schemes. The HFA has also inspired the identification and systemization of legal principles and rules informing disaster risk management, as exemplified by the United Nations International Law Commission's first reading draft on the protection of persons in the event of disasters. Overall, the HFA has been an important instrument in raising public and institutional awareness, and political will, and focusing and catalyzing actions by a wide range of stakeholders at local, national, regional, and global levels.

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3. At the same time, however, around 300 biennial reports of countries on the HFA implementation indicate that exposure of people and assets in all countries has increased faster than vulnerability has decreased, thus generating new risk and a steady increase in disasters losses, with significant socio-economic impact in the short, medium and long terms, especially at the local and community level. The impacts of natural and human-induced hazards and disasters continue to increase. For example, in the first fourteen years of the 21st Century the total loss of human lives in earthquakes and the resultant tsunamis has exceeded the similar loss in the entire 20th Century. There are risk factors which have not received sufficient attention and indeed constitute underlying risk drivers. Factors such as unequal economic development, poorly managed urban development and ecosystems, poverty and inequality, weak participatory governance, weak enforcement, insufficient local capacities, inadequate and inappropriate policies and resources, conflicts, and climate change and variability compound disaster risk and hence the levels of disaster loss. Moreover, these risk

drivers condition the resilience of households, communities, businesses and the public sector and thus influence whether disaster loss generates a wider range of short and long-term social, political and economic impacts. Furthermore, as a consequence of disaster risk, all governments, and especially developing countries, are faced with increasing levels of hidden potential costs and challenges to meet financial and other obligations. Disaster risk may also affect people, communities and countries' safety and security as well as their health, social, economic and environmental assets.

Here, it would be worth adding a paragraph to stress that DRR is core to the contemporary development agenda and given the new challenges and opportunities, the post-2015 framework for DRR to embrace and encourage resilience and transformation. This new context is characterized by the rapidity and scale of dynamism and connectedness in social and environmental systems, and in particular:

- Systemic risk and local consequences – loss associated with natural hazard trigger events can spill over to generate vulnerability in health systems, the economy, political stability and ecosystem service provision.
- Uncertainties for risk management from climate change
- Accelerated production of exposure and vulnerability in dominant development paths is continuing. This is articulated in the standing text but does not convey the urgency it might. We are approaching or have exceeded global limits in the Anthropocene and this is a new planning context – The HFA should have a view on underlying resource use question and the distribution of goods that result, this is a major 'root cause' issue.
- Shifting rights and expectations for security from risk:

From this new context emerges the need to move from reducing risk to enable development to bringing risk reduction and development together to identify sustainable and safe development pathways. This in turn can be summarised as a move from resilience (stability seeking) to resilience and transformation (supporting self-realisation and development).

A definition of resilience should be included.

4. The new framework should address all types of hazards which could result in disasters, including geological, hydro-meteorological, technological and biological hazards such as epidemics and pandemics. The link to societal hazards, such as conflict, social unrest and financial crises should also be considered because there are some commonalities in the approaches to managing the respective risks.

5. Health is increasingly recognised in non-health sectors as a key outcome. Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (WHO, 1948) and the right to life, liberty and security of person is enshrined in the Universal Declaration of Human Rights. As such, disaster risk reduction and the promotion of healthy communities have clear synergies: the prevention of illness and provision of healthcare services can increase community resilience in preparing for and responding to disasters, while disaster risk reduction should minimise the risk of death, illness and injury and the burden of disease.

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6. Trends, such as the increasing interconnectedness and interdependence of globalization, a world heavily-reliant on technology, patterns of consumptions and production, a changing climate, land degradation and desertification, all contribute to modify the nature and characteristics of, and amplify disaster risk. Such trends require that the actions and programs initiated under the HFA continue with perseverance and determination. The momentum generated by the HFA needs to be reinforced further by the post-2015 framework for disaster risk reduction with a much stronger focus on anticipating long-term risk scenarios and concrete measures to prevent the creation of new risk, reduce the existing risk and strengthen economic and social resilience of countries and people, by addressing both people. This will require addressing both people and assets' exposure and vulnerability, as well as harnessing the opportunities presented by increased interconnectedness and interdependence.

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7. The consultations on the post-2015 framework for disaster risk reduction have provided clear guidance on the following:

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- Investing in addressing underlying risk factors by mainstreaming disaster risk reduction and strengthening development investments is more cost-effective than is primary reliance on post-disaster response and recovery.

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Risk-informed investments and strengthened financial instruments are required at national and international levels.

- The stated commitment of the political leadership at every level in every country to manage disaster risk is a crucially important driving force for success and to strengthen cooperation.
- Disaster risk management policies and plans should be tailored to and take into account the political and administrative structure of the state.
- There is consensus across countries and stakeholders that the post-2015 frameworks for disaster risk reduction, sustainable development and climate change, while different in nature, be coherent, mutually reinforcing and pragmatic in their policy guidance and implementation mechanisms; building on the Cancun Adaptation Framework, adequate references, for implementation purposes, to the post-2015 framework for disaster risk reduction in future sustainable development and climate change instruments would be a pragmatic way forward and enable the post-2015 framework for disaster risk reduction to contribute to the sustainability of development.
- Countries are encouraged to improve governance and its articulation in institutions' powers and design, sector-specific strategies and plans, citizens' participation in decision-making and action on questions critical for the future, enabling conditions for partnerships and readiness of stakeholders to participate.
- It is necessary that all stakeholders be recognized and take on roles and responsibilities in order to play their part in close partnerships in the common endeavor, as States' institutions alone cannot tackle the challenges to manage disaster risk;
- Leadership, capacities, and resources for disaster risk reduction of local communities and authorities are essential, together with partnerships between local authorities, communities, civil society, academia and business in the planning and implementation of local level disaster risk management;

- Local disasters constitute a significantly high percentage of losses in all countries, and require full attention.
- Poverty is a main disaster risk driver, and development policies focused on reducing this burden contribute to reducing disaster risk and loss and strengthen resilience of the poor and most vulnerable.
- The mainstreaming and integration of disaster risk assessment in development cooperation programs of bilateral and multilateral nature should be promoted.
- Special attention should be given to developing countries, in particular small island developing States, landlocked developing countries, and least developed countries, and Africa. In particular, sharing of information, knowledge, technology and experience are necessary, and existing mechanisms, practices, tools should be strengthened further.
- Continued attention should also be given to special communities within more economically developed countries where indigenous minorities and minority groups continue to face challenges in terms of integration and participation in the wider community and state mechanisms.
- International cooperation, through predictable, sustainable and adequate means of implementation in finance, technology transfer, technical cooperation and capacity building, is critical for all countries, in particular for developing countries.

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8. This framework builds on the HFA by retaining the HFA expected outcome and integrating and strengthening the focus of the priorities for action, and giving more prominence to addressing the underlying risk factors and resilience through new strategic goals which replaces the HFA goals.

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## B. Purpose, Scope, Outcome and Goals

### General Comments

*Section B, paragraph 7 positions the discussion on DRR/M within the development landscape. However, the rest of the text at present talks only to core dimensions of existing ISDR/HFA I activity and fails at reaching out to provide a bridge into development. The lack of a bridge between DRR/M and development has long been recognised as a core barrier to risk reduction and HFA II is an opportunity to send a clear signal of intent and ambition by governments to address this concern.*

9. The purpose of the present framework is to reduce and manage disaster and climate risk in development at local, national, regional and global levels to strengthen the resilience of people, communities and countries. This includes consideration of people's and communities' health, economic, social and environmental wellbeing.

**Deleted:** 7**Comment [A1]:** This ambition to position the discussion on DRR/M within the development landscape should be reflected in other parts of the document for consistency (including in the preamble)

10. The present framework applies to the risk of small and large-scale, frequent and infrequent, disasters caused by exposure and/or vulnerability to natural, and human-induced environmental and technological hazards.

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11. In keeping with the HFA expected outcome, the present framework aims to achieve the substantial reduction of disaster losses, in lives, healthy years lived and in the social, economic and environmental assets of communities and countries, and prevent disaster losses when possible.

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12. To attain the expected outcome, the following three strategic and mutually-reinforcing goals are pursued:

- I. The minimization of disaster risk creation. This requires the adoption of risk-informed growth and development measures that aim to address and reduce exposure and vulnerability.
- II. The reduction of existing disaster risk. This requires measures that address and reduce exposure and vulnerability, including preparedness for disaster response.
- III. The strengthening of persons, communities and countries' disaster resilience. This requires health-related, social, economic, structural, technological, and environmental measures that enable persons, communities and countries to absorb loss, minimize impact and recover.

13. To support the assessment of global progress in achieving the expected outcome, five global targets are identified: reduce disaster mortality by [a given percentage in function of number of hazardous events] by 20[xx], reduce the number of affected people by [a given percentage in function of number of hazardous events] by 20[xx]; reduce disaster economic loss by [a given percentage in function of number of hazardous events] by 20[xx], and reduce disaster damage to health and educational facilities by [a given percentage in function of number of hazardous events] by 20[xx], increase number of countries with national and local strategies which integrate DRR into development by [a given percentage] by 20[xx], increase number of countries with national and local loss data collection strategies by [a given percentage] by 20[xx].

*MGST agrees it is attractive to have specific targets, but careful analysis is required to determine what targets are achievable, and by what means and maintaining consistency with SDG and Climate Change Agreement Targets and Goals. These must also be considered in the context of increasing risks and what will be required to simply reverse the current and future trends, particularly in exposure.*

14. Support for the science community at international, national and local levels, to help in providing methodologies to determine and measure targets and to standardise quality of data.

**Comment [A2]:** Calls for coordination with the humanitarian sector

**Comment [A3]:** (2)Goal II and III imply the end goal is a return to pre-disaster conditions. This shows a significant lack of ambition and is out of line with a considerable body of science work and stakeholder positions that would argue for the post-disaster settlement to aim for improved development opportunity and capacity and improved risk management – through enhanced critical infrastructure, employment training, gender equity, representative governance etc. This lack of ambition for DRR is a major concern. The ambition may be difficult to achieve but this should not prevent its articulation.

**Comment [A4]:** By placing the goals before as the highest order priority statement, followed by the global targets, the structure of the document will be more explicit. The goals and targets then feeds into the priorities for action

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**Comment [A5]:** The five global targets provide quantitative outcome indicators to track progress on – reducing mortality, reducing the number affected, reducing economic loss, reducing damage to health and education facilities, and increasing the number of countries with national and local strategies. These goals provide a potentially effective mechanism of connecting HFA to the SDG indicators. This is positive (and commented on below). A trade-off is that the communicating strength of quantitative indicators may attain higher profile than the underlying three goals. This is acceptable if the individual Priorities for Action can lead to the generation clear indicators that in turn can allow some analysis of investment in DRR/M status (Priorities) and outcomes (global targets) and vision (goals). The e ... [1]

**Comment [A6]:** We suggest that this section indicates a clear role for science in developing and improving indicators, working to generate infrastructure for data collection and perhaps alternative, parallel metric systems.

## C. Guiding principles

14. The principles contained in the Yokohama Strategy and the HFA general considerations retain their full relevance and are complemented as follows to guide implementation.

- a) Each State has the primary responsibility to holistically manage disaster risk, including through cooperation.
- b) Managing the risk of disasters should also be aimed at protecting persons, their livelihoods and property, while respecting their human rights.
- c) Disaster risk management is an essential component of governance at local, national, regional and global levels, and requires the full engagement of all state institutions of executive and legislative nature at local and central levels.
- d) Disaster risk management requires an [ethical approach to achieve](#) all-of-society engagement and empowerment, equality, and an inclusive and non-discriminatory participation. Gender considerations are to inform all policies and practices, and women's leadership is to be promoted. Children and youth, [the elderly](#), persons with [illness or](#) disabilities, [minority groups](#) and indigenous peoples are to be fully engaged in the determination and implementation of policies.
- e) While the causes and consequences of risk may be national, transboundary or global in scope, disaster risks have local and specific characteristics and their management requires the full leadership and empowerment of local communities and administrators.
- f) A clear recognition, articulation and alignment of responsibilities across public and private stakeholders, including volunteers, are essential to ensure implementation and accountability in disaster risk management.
- g) Building on and leveraging the potentials, as well as taking into account the needs, of all groups of society, especially the poor, [those who are ill](#), and vulnerable, are a requisite for effective disaster risk management policies and practices.
- h) Transparency in, and the disclosure of, disaster risk information in public and private transactions and investments are essential, together with accountability for risk creation.
- i) Sound disaster risk management is based on risk-informed decision-making, which requires freely [and publicly](#) available, [accessible](#), science-based, [location-](#)

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I. The prevention minimization of disaster risk creation which requires the adoption of risk-informed growth and development measures that aim to address and reduce exposure and vulnerability increase in exposure and vulnerability.¶

II. . The reduction of existing disaster risk which requires measures that address and reduce exposure and vulnerability, including preparedness for disaster response.¶

III. . The strengthening of persons, communities and countries' disaster resilience which requires health-related, social, economic, structural, technological, and environmental measures that enable persons, communities and countries to absorb loss, minimize impact and recover.¶

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specific risk information that can be understood by a range of decision-makers and stakeholders. This should include information on disaster losses, health and socio-economic impact, hazards' characteristics, as well as people and assets' exposure and vulnerability, at every level, supported by what has been referred to as an International Science Advisory Mechanism. The contribution of information from relevant, local, traditional, cultural and indigenous knowledge and practices, must also be included. Promotion of the use, application and affordability of information, communication, space-based and geospatial information technologies and relevant services, as well as earth observations are essential to support disaster risk reduction, particularly for the sharing and dissemination of information among different categories of users.

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- j) Countries and communities' risk profiles need to be fully understood and differential capacities duly taken into account in the planning and implementation of disaster risk management.
- k) The sustainability of development depends on the ability to manage disaster risk. Public and private investments are to be disaster-risk informed.
- l) The post-disaster recovery and reconstruction phase is a critical opportunity to prevent the creation of new risk, reduce existing risk, build capacity and strengthen resilience in terms of health, social, economic and cultural assets as well as physical and natural resources.
- m) An effective and meaningful global partnership and international cooperation are essential to allow for effective disaster risk management. Specific attention needs to be given to developing countries, in particular least developed countries, small island developing States, and landlocked developing countries, and Africa. Predictable and sustainable means of implementation including access to resource and technology are crucial in this regard and need time-bound commitments.
- n) The United Nations system, through the UN Plan of Action on Disaster Risk Reduction for Resilience, and other relevant International Organizations need to work together with a view to avoid duplication and ensure optimum use of resources in support to countries and benefit of the most vulnerable.

#### D. Priorities for action

15. In pursuing the three strategic goals, and drawing from the knowledge and experience matured in the implementation of the HFA and the previous instruments, there is a need for focused, specific, yet mutually supportive actions in the local, national, regional and global contexts, in key priority areas, namely understanding disaster risk; improving data collection and sharing; strengthening governance to manage disaster risk; building capacity and preparedness for response, recovery and reconstruction; and investing in social, economic, and environmental resilience and transformation towards sustainable development.

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**Comment [A7]:** It is important that the ambition of the post-2015 framework for disaster risk reduction is not limited to a return to pre-disaster conditions but uses the opportunities to enhance sustainable development and risk management status.

I. National and local context*Understanding disaster risk*

16. National and local policies and practices for disaster risk management should be based on a clear understanding of risk in all its dimensions of vulnerability and exposure of persons and assets and hazards characteristics, particularly at the local level. Actions should include:

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- a) Systematically survey, record and publicly account for all disaster loss and impacts including assessment of underlying hazards, physical and environmental damage, as well as health, social and economic impact, taking into account gender-specific and sex/age/disability and chronic illness- disaggregated data. A standard data collection process for damage assessment is essential.
- b) Periodically assess disaster risks, hazard characteristics and vulnerability of persons, economic and fiscal assets, and cultural heritage including critical infrastructure's exposure to natural hazards.
- c) Promote free and open availability of and access to information on risk, disasters and loss, and its dissemination, at all levels, taking into account the needs of different categories of users.
- d) Enhance the collection, exchange and dissemination of risk and disaster information through inclusive coordination arrangements, such as national and local platforms and community centers, and promote the engagement of the private sector for resilient investments and the use of evidence-based science and technology linking to the International Science Advisory Mechanism.
- e) Build the capacity of local government officials and stakeholders, especially through training and learning programmes in disaster risk reduction targeted at specific sectors in order to ensure consistent implementation of disaster risk related evidence-based policies and plans and their systematic evaluation.
- f) Strengthen networks among disaster experts, managers and planners, and scientists across sectors and between regions, and create or strengthen procedures for using available scientific expertise when agencies and other important actors develop local risk reduction plans.
- g) Promote community-based training initiatives, considering the role of volunteers, as appropriate, to enhance local capacities to mitigate and cope with disasters.
- h) Promote and improve dialogue and cooperation among scientific communities, including health, environmental, social and economic sciences, decision-makers and practitioners working on disaster risk management.
- i) Strengthen the technical and scientific capacity to develop and apply methodologies, studies and models to assess exposure, risks and vulnerabilities to and the impact of geological, hydrometeorological, biological and other natural hazards, and technological hazards including

**Comment [A8]:** Surveys of disaster losses should also include assessments of the underlying hazard and include physical (e.g., buildings and infrastructure) and environmental loss/damage as well as social and economic loss. This information is required to relate hazard events (causes) to losses (effects), which is essential to improving forecasts of future impacts through risk assessments.

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the improvement of regional monitoring capacities and assessments; and strengthen capacity for disaster loss accounting.

j) Promote the incorporation of disaster risk education, including preparedness to prevent, respond to and recover from disasters, in educational curricula at all levels as well as in informal education systems.

k) Promote public education and awareness through campaigns, social media, community mobilization and other available means.

l) Enhance risk communication and public awareness of hazards and vulnerabilities at all levels

m) Develop systematic approaches to better understand the root causes of disaster risk production and accumulation in development pathways in order to promote development along more disaster resilient pathways. This will require close collaboration between science, policy and practitioners communities.

#### *Strengthening Governance to Manage Disaster Risk*

17. Governance and its structuring is of paramount importance and conditions the effective and efficient management of disaster risk. Interactions between risk information provider and user are essential to understand risk and strengthening governance to manage disaster risk. Within countries' capacities, the strengthening of governance for disaster risk management may prioritize:

a) Mapping of empirical and current efforts and initiatives that are relevant to disaster risk reduction at local and national level and building on those that are evidence-based and have been demonstrated to be successful

b) Adoption and implementation of evidence-based national and local plans, with clear targets, indicators and timeframes, aimed at preventing the creation of risk, the reduction of existing risk, and the strengthening of economic, social and environmental resilience for sustainable development.

c) Availability of mechanisms to monitor, periodically assess and publicly report on progress through systematic evaluation.

d) Promotion of public and institutional debates and scrutiny, including by parliamentarians and other elected officials, on progress reports and evaluation of local and national plans.

e) Develop specific mechanisms to engage the active participation and ownership of relevant stakeholders, including local communities, in disaster risk management, in particular building on the recognition that persons, communities and countries need to protect their assets and development gains, as well as leveraging the spirit of volunteerism.

f) Establishment or further strengthening of all-stakeholders coordination mechanisms at

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**Comment [A9]:** Reporting on progress is more akin to a principle than an action. This statement needs to be backed up by a tangible description of a reporting process, including links to the data and information that have been referred to earlier in the document.

There is also a need to specify what exactly is the progress we shall monitor, assess and report on i.e. link it to relevant article herein or expand in this article itself

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national and local levels, such as national and local platforms for disaster risk reduction. Such mechanisms should have a strong foundation in the institutional set up, including through laws, regulations, evidence-based standards and procedures, with clearly assigned responsibilities and delegated authority for the determination, implementation and evaluation of national and local disaster risk management plans.

g) Empower through regulatory and financial means local action and leadership in disaster risk management by local authorities, communities, and indigenous people.

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h) Promote the coherence of, and further develop as appropriate, national and local frameworks of laws, regulations and public policies that, through defining roles and responsibilities:

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- Guide the public sector in addressing disaster risk in publically owned, managed or regulated services and infrastructure, and in the environment;
- Regulate and provide incentives for actions by households, individuals, communities, and businesses, particularly at the local level.

i) Promote the integration of disaster risk management into development policies and planning at all levels of government, including in poverty reduction and sustainable development strategies and sectors and multi sector policies and plans.

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j) Stimulate the development, together with the private sector and professional associations and scientific organizations, of disaster risk management quality standards and mechanisms for compliance, including certification, in specific sectors.

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#### *Preparedness for Response, Recovery and Reconstruction – “Build Back Better”*

18) There is a call to further strengthen early warning, preparedness systems and emergency responses, motivated by the increase in disaster events as well as evidence that such systems contribute to saving lives and increasing efficiency of preparedness and response. With the increase in magnitude of disaster impacts, not least in highly urbanized settings, and of disasters affecting large numbers of people and high-value national and local infrastructures and economic assets, the cost and complexity of reconstruction is rising. This provides an opportunity to enhance response, reconstruction and movement into the post-disaster development space. Actions should include:

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- a) Mapping current systems that address disaster risk reduction and disinvesting from programs that have not demonstrated effectiveness when evaluated or that are not based on scientific evidence.
- b) Preparing or reviewing and periodically updating disaster preparedness and contingency plans and policies at all levels, with a particular focus on ensuring in the design and planning the participation of all social groups, including the most vulnerable (including minorities, the disabled, the young, the elderly, women and those with chronic illness).
- c) Continuing to further strengthen early warning systems and tailoring them to users' needs,

**Comment [A10]:** Check this paragraph for consistency: Build back better refers to post-disaster action, the policy sites (early warning) is pre disaster and also unlikely to enhance development gain. Greater clarity would come from using transformation instead of build back better to describe pre-and post-disaster opportunity.

including social and cultural requirements, and building capacity for their effective implementation, especially in developing and least developed countries.

d) Promoting regular disaster preparedness exercises, including evacuation drills, with a view to ensuring rapid and effective disaster response and access to essential food and non-food relief supplies as well as emergency health services and shelter that can preserve continuity of care as well as treat any casualties, as appropriate, to local needs.

e) Adopting specific public policies, and establishing coordination and communication networks and funding mechanisms and procedures to plan and prepare for disaster response, post-disaster recovery, rehabilitation, reconstruction and displacement in order to mitigate and minimize losses, and enable sustainable development.

f) Engaging diverse institutions, multiple authorities and stakeholders at all levels, in view of the complex and costly nature of post-disaster reconstruction. Learning from the reconstruction programs over the HFA decade and exchange of experience is critical to provide guidance for a preparedness for reconstruction in the future.

g) Promoting the incorporation of disaster risk management into post-disaster recovery and rehabilitation processes and using opportunities during the recovery phase to develop capacities that reduce disaster risk in the medium and long term, including through the sharing of expertise, knowledge and lessons identified.

h) Promoting the use of hazard and risk analyses to inform reconstruction

i) Periodically devising vulnerability maps that inform preparedness and guide disaster response and relief efforts.

*Investing in Social, Economic and Environmental Resilience for sustainable development*

19. Social, economic and environmental investments are essential to strengthen the resilience of persons, communities, countries and their assets. A continued focus on key development areas, such as health, education, employment and livelihoods, food security, water, ecosystem management, housing, cultural heritage, public awareness, innovative financial and risk transfer mechanisms, especially for local governments, households, and the poor and vulnerable is required. In particular, the following may be prioritized:

a) Strengthening the implementation of social safety-net mechanisms to assist the poor and particularly exposed groups, such as older persons and persons with disabilities or chronic illness, and other populations that are exposed to disaster risk and are affected by disasters.

b) Investing in people-centred early warning systems and related capacity building and technology transfer mechanisms in particular towards local communities and emergency responders

c) Enhancing recovery programmes including psycho-social training programmes, with

**Comment [A11]:** In addition, this needs to be accompanied by actions that assist in the implementation of EW systems, which include in-country capacity building in developing and less developed countries through sharing scientific and technological know-how, through technology transfer such as existing relevant systems, and through assistance in the maintenance of operational EW systems

**Comment [A12]:** The vision for HFA2 should be to build risk reduction that can cope with a changing future and reduce risk through enhanced development rather than limiting it to recovery from impact

**Comment [A13]:** to strengthen our resilience to disasters technological and structural investments are also needed, even at the most basic level, which are often lacking in developing and lesser developed countries,

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effective monitoring systems, in order to mitigate the psychological damage of high risk vulnerable populations, particularly children, in the aftermath of disasters, in order to mitigate the psychological damage of vulnerable populations, particularly children, in the aftermath of disasters.

d) Protecting and strengthening all critical infrastructure facilities and systems, particularly schools, clinics, hospitals, water and power plants, communications and transport lifelines, IT-based infrastructures, disaster warning and management centres, and culturally important lands and structures through proper design, retrofitting and re-building, in order to render them adequately resilient to hazards.

e) Endeavoring to ensure, as appropriate, that programmes for displaced persons do not increase exposure, risk and vulnerability to hazards.

f) Allocating resources at all level of the administration for the development and the implementation of disaster risk management policies, plans, laws and regulations in all relevant sectors.

g) Reviewing existing financial and fiscal instruments in order to integrate climate and disaster risk funding and support risk-sensitive public and private investments.

h) Promoting of innovative opportunities for public-private partnerships to support efforts to manage disaster risk.

i) Strengthening policy, scientific, technical and institutional capacities in local and national disaster risk management, including those related to technology, training, and human and material resources.

j) Investing in education at all levels on disaster risk reduction; and in community awareness of risks and hazards relevant to them; and in preparedness actions including evacuation drills

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**Comment [A14]:**

Revise "protect and strengthen critical public facilities and physical infrastructure" to say "protect and strengthen all critical infrastructure facilities and systems, including physical, cyber, communications, ...". For instance, the Australian Government definition of critical infrastructure includes physical systems and the flow of information, food, energy, communication that it supports.

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k) Promoting the integration of disaster risk management measures in economic valuations, cost-benefit analyses, competitiveness strategies and investment decisions, including in debt ratings, risk analysis and growth forecasts, as well as the determination of incentives, investment scale and timeliness of disbursement, and the spreading of costs over time.

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l) Land-use policy development and implementation, including urban planning, informal and non-permanent housing, should be given special attention due to their direct impact on risk exposure and health.

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m) Promoting science-driven disaster risk assessment and its incorporation into development planning and management (especially of rural areas), in particular with regard to mountain and coastal flood plain areas, including through the identification of land zones that are available and safe for human settlement,

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n) Investing in research and technology to address gaps and research priority areas in DRM, especially in improving disaster resilience (e.g. resilience of infra-structures; risk/vulnerability/exposure assessment methods and models; hazard monitoring; early warning, communication);

o) Strengthening the sustainable use and management of ecosystems from scientific evidence.

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p) Implementing integrated environmental and natural resource management approaches that incorporate disaster risk reduction.

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q) Encouraging the revision of existing or the development of new building codes, standards, rehabilitation and reconstruction practices at the national or local levels, as appropriate, with the aim of making them more applicable in the local context, particularly in informal and marginal human settlements, and reinforce the capacity to implement, monitor and enforce such codes, through a consensus-based approach, with a view to fostering disaster-resistant structures.

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**Comment [A15]:** Consider moving under paragraph 16

r) Supporting the establishment of national mechanisms that can facilitate the interface "scientific advice/information-policy" for effective decision-making in disaster risk management.

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## II. Global and regional context

### *Understanding Disaster Risk*

20. The understanding of disaster risk drivers and trends, and the evolution of future risk scenarios, requires an all-states and all-stakeholders effort in a number of areas for action, such as information collection, analysis and dissemination, advancement of research and development of understanding of risk and risk production, as well as continuous monitoring and evaluation, improved interfaces between scientists, policy-makers and practitioners, and exchange of practices and learning. In that connection:

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a) Standardised methodologies for risk assessment, monitoring and evaluation, recording

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of disaster events and related statistics, and sharing of information should remain a priority, together with the necessary support for data gathering and risk modelling for planning purposes.

b) Global campaigns, such as “The One Million Safe Schools and Hospitals”, “Making cities resilient: my city is getting ready”, and the “UN Sasakawa Award for Disaster Reduction” as well as the yearly UN International Day for Disaster Reduction, are important means to promote a culture of prevention, and cross-sectoral work, generating a shared understanding of disaster risk, supporting mutual learning and the sharing of experience. All public and private stakeholders are encouraged to actively engage and join such initiatives, and develop new ones at local, national, regional and global levels, with similar purposes.

c) It is critical to continue promoting the use, application and affordability of information, communication and space-based technologies and related services, as well as earth observations, to support disaster risk reduction.

d) The functions of Scientific and Technical Committee, established by the General Assembly in its resolution 44/236 of 22 December 1989<sup>1</sup>, should be realized by reactivating and realigning as needed existing international organizations, networks and research programmes revitalized as an international science advisory mechanism, built on networks of national and regional institutions, using a Science and Technology Engagement Partnership for DRR (STEP 4 DRR) in order to strengthen the evidence base in support of the implementation and monitoring of this framework; promote scientific research into risk patterns and trends and the causes and effects of disaster risk in society; to promote and support the availability and application of science to decision-making; and to use post-disaster reviews as opportunities to learn and enhance public policy

e) Strengthen the technical and scientific capacity to develop and apply methodologies, studies and models to assess vulnerabilities to and the impact of geological, hydro-meteorological, biological, outer space and other natural hazards, including the improvement of global monitoring capacities and assessments.”

#### *Strengthening governance to manage disaster risk*

21. The inclusive and participatory international cooperation frameworks for disaster risk management developed over the past ten years at regional and global levels have demonstrated that effectiveness in mobilizing stakeholders and contributing to a more coherent, joined-up approach by international organizations in supporting countries to manage disaster risk may need to be further strengthened. In that regard:

a) Agreed regional and sub-regional strategies for disaster risk reduction should continue to guide action at regional level, including focusing funding of bilateral and multilateral cooperation initiatives, and promoting information sharing across countries.

b) Collaboration and mutual reinforcement should be ensured across mechanisms and institutions for the implementation of instruments relevant to disaster risk, such as for

<sup>1</sup> See Annex 1 for the relevant text from resolution 44/236

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#### **Comment [A16]:**

The regional and global center could take more responsibility and accountability to share information to national system

**Comment [A17]:** This could be ambiguous



climate change, sustainable development, and others as appropriate.

c) The Global Platform for Disaster Risk Reduction and the regional and sub-regional platforms for disaster risk reduction should remain important multi-stakeholder mechanisms to forge partnerships, periodically assess progress on implementation and share practice and knowledge on risk-informed policies, programmes and investments, including on development and climate issues.

d) Voluntary and self-initiated peer reviews among countries and cities should be given due consideration, as they may represent a very useful mechanism to support national efforts, reviews of progress, mutual learning, exchange of best practices and identification of specific areas for future technical cooperation, exchange of information, technology transfer and financial support, as relevant.

e) Monitoring is essential to assess progress and adopt the necessary corrective measures. International monitoring mechanisms, such as the HFA Monitor, are intended to support and complement national and local monitoring systems, and provide useful understanding on overall regional and global efforts to manage disaster risk. Such information may be of relevance in the consideration of progress on the sustainable development agenda and goals, and on climate change. The current HFA Monitor will be enhanced in order to more effectively measure progress, including in terms of outcome and output indicators, and to ensure coherence between the global HFA Monitor and the regional HFA Monitor processes and outcome reports, as well as support and contribute to the monitoring of progress of the sustainable development agenda and goals, as relevant.

#### *Preparedness for response, recovery and reconstruction*

22. The continued strengthening of cooperation at regional and global level on preparedness for response, recovery and reconstruction is critical and may require the following additional measures:

a) Strengthen and when necessary develop coordinated regional approaches, and create regional policies, operational mechanisms, plans and communication systems to prepare for and ensure rapid and effective disaster response in situations that exceed national coping capacities.

b) Promote the further development of [evidence-based](#) standards and other guidance instruments to support preparedness and response, and contribute to the lessons learned for policy practice and reconstruction programmes.

c) Promote the development of predictable cooperation and coordination mechanisms for preparedness and response, which may include use of business facilities and services and military assets as relevant and appropriate.

d) Promote the further development of regional early warning mechanisms to ensure that information is [shared](#) across all relevant countries.

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**Comment [A18]:** In addition, this needs to be accompanied by actions that assist in the implementation of regional EW systems, which include in-country capacity building in developing and less developed countries contributing to regional EW systems, through sharing scientific and technological know-how, through technology transfer such as existing relevant systems, and through assistance in the maintenance of operational regional and national EW systems

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e) The experience of International Recovery Platform indicates that international mechanisms for the sharing of experience and learning among countries and all stakeholders, as well as the development of [evidence-based](#) guidance, may need to be enhanced.

### *Investing in social, economic, and environmental resilience*

23. Investments are needed to strengthen the capacity to record, analyze, summarize, disseminate, and exchange statistical information and data on hazards mapping, disaster risks, impacts, and losses. In that connection:

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a) Access to and transfer of environmentally sound technology, science and innovation as well as knowledge and information sharing should be enhanced further through existing mechanisms, including the United Nations, and other relevant bodies, in order to support countries to manage disaster risk.

b) Disaster risk reduction measures should be mainstreamed appropriately into multilateral and bilateral development assistance programmes including those related to poverty reduction, natural resource management, urban development and adaptation to climate change.

[c\) Good practice that is already in existence should be identified, championed and shared](#)

d) Innovative opportunities should be promoted and explored for public-private partnerships and North-South, South-South, and triangular cooperation, in particular at regional level, in order to support countries' efforts to manage disaster risk.

[e\) Engagement in and supporting research and innovation in disaster risk management should be promoted.](#)

### III. Role of Stakeholders

24. The implementation of the measures at local, national, regional and global levels will require the full commitment, goodwill, knowledge, experience and resources of all stakeholders, as relevant. Effective and meaningful local, national, regional and global partnerships to manage disaster risk can greatly contribute to the further evolution of strong and predictable system for cooperation.

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25. While States, building on existing relevant international instruments, may determine more specific roles and responsibilities for all public and private stakeholders in accordance with national plans and priorities, some indications may include:

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- Business, professional associations, private sector financial institutions and philanthropic foundations are encouraged to: actively engage with the public sector [in the development](#) of laws, policies and plans to manage disaster risk; base investment decisions on risk considerations; integrate disaster risk management in business models and practices; develop quality standards for disaster risk management; give

special attention to strengthen disaster risk management in small and medium enterprises; engage in and support research and innovation in disaster risk management; share knowledge and practices; invest in prevention and strengthen disaster risk management practices through supply chains; and advocate for disaster risk management with customers.

- Academia and the research community are encouraged to: focus on the evolving nature of risk and spatio-temporal scenarios in the medium and long terms; increase research for local application and support for communities and authorities' action; assess scientific evidence, synthesize and promote access to the policy-relevant results of research on disaster risks and preparedness; and support the interface between policy and science for effective decision making.

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- Media are encouraged to: take an active role at local, national, regional and global levels to contribute to raising public awareness and understanding and to disseminate risk, hazards and disaster information, including that relating to small-scale disasters, in a simple, easy to understand and accessible manner, in close cooperation with science and academia; and stimulate a culture of prevention and strong community involvement in sustained public education campaigns and public consultations at all levels of society.

- Financial, investments, and trade institutions are encouraged to review and revise financial and trade regulations on the basis of disaster risk management considerations and disaster risk information.

- Social groups, volunteers, and civil society and faith-based organizations, are encouraged to engage with public institutions and business to, *inter alia*: provide specific knowledge and pragmatic guidance in the context of the development and implementation of normative frameworks, standards and plans for disaster risk reduction; engage in the implementation of local, national, regional and global plans and strategies, and their monitoring; contribute to and support public awareness and education on disaster risk; and advocate for an inclusive and all-of-society disaster risk management which strengthen the synergies across groups. Moreover, in particular:

o Children and young persons should be recognized for their contribution through their perspectives, knowledge, skills and needs to ensure that disaster risk plans designing, resourcing and implementation are tailored accordingly, and should be given the space and modalities to contribute.

o Women should be recognized as critical to increasing and adding to the capacity to manage disaster risk, and to designing, resourcing and implementing gender- sensitive disaster risk management.

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o Persons with disabilities, the elderly, and minority groups should be recognized as critical in the assessment of risk, and in the design and implementation of plans tailored to specific requirements; and in increasing the awareness and education for an accessible disaster risk management for all.

o The local knowledge and experience of the indigenous people, and elderly

residents should also be recognized, particularly in situations where there are gaps in science-based knowledge

26. With reference to the UN General Assembly resolution A/RES/68/211 of 20 December 2013, the commitments are instrumental to identifying modalities of cooperation and implementing this framework. Commitments need to be specific, predictable and time-bound in order to support the development of partnerships at local, national, regional and global levels, and the implementation of local and national disaster risk management plans.

27. All stakeholders are encouraged to publicize their commitments in support of the implementation of this framework or of the national and local disaster risk management plans through the UNISDR website.

**Comment [A19]:**

What of the indigenous and or local knowledge resident in the elderly, as well as their practical historical experience, particularly in situations where there are gaps in science-based knowledge

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## E. International partnership in the implementation and follow-up process

28. While it is a primary responsibility of States to build resilience and enhance sustainable development, there is a strong expectation for the further strengthening of international cooperation and the forging of an international partnership for disaster risk reduction. Managing disaster risk requires an all- states and all-stakeholder effort, given the complexity of the task at hand and the relevance to humanity as a whole. Building resilient and sustainable development pathways requires policy to be built on scientific evidence. In this connection:

a) Developing countries, in particular least developed countries, small island developing States, and landlocked developing countries, and Africa remain most vulnerable to disasters and the impact of climate change and thus require adequate international assistance, through bilateral and multilateral channels, for the development and strengthening of their capacities in the areas of disaster prevention and building resilience, including through financial and technical assistance, and technology transfer on mutually agreed terms.

b) International cooperation efforts should continue giving priority to strengthening countries' capacity and modalities to manage transboundary disaster risk, including potential disaster-related displacement, through the further development of early- warning systems, sharing of knowledge, and facilitating technology transfer, and the availability of climate services and other relevant earth observation systems.

c) Intergovernmental organizations of global and regional nature, including international financial institutions, such as the World Bank Group, the International Monetary Fund, and the Regional Development Banks, and the United Nations system's entities, including funds, programs, and specialized agencies, through its United Nations Plan of Action on Disaster Risk Reduction for Resilience, as well as the Red Cross and the Red Crescent Movement should be called upon to support countries and other stakeholders in the implementation of this framework, including the development of relevant sector evidence-based policies and standards, monitoring and evaluation mechanisms and the strengthening of capacities, through clear and focused programs that support in a balanced and sustainable manner countries' priorities.

d) The international scientific community including donors should be called upon to support the strengthening of integrated research into disaster risk, resilience and transformation towards sustainable development, to focus on the evolving nature of risk and scenarios in the medium and long terms; to increase research and its sharing for local application and support to local communities and authorities' action; to promote the involvement of young scientists in capacity building and science dissemination. Governments should provide support and also encourage science to partner with civil society, public bodies, those at risk and the private sector research and practice communities.

e) Adequate voluntary financial contributions should be provided to the United Nations Trust Fund for Disaster Reduction, in the effort to ensure adequate support for the follow-up

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activities to this framework. The current usage and feasibility for the expansion of this fund, should be reviewed, inter alia, to assist disaster-prone developing countries to set up national strategies for disaster risk reduction.

f) The Inter-Parliamentary Union (IPU) and other relevant regional bodies and mechanisms for parliamentarians, are encouraged to support the implementation of the deliberations adopted thus far and advocate for disaster risk management.

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g) The United Cities and Local Governments (UCLG) and other relevant bodies of local governments are encouraged to carry forward the implementation of the deliberations adopted thus far, and support cooperation and mutual learning among local governments.

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g) The UNISDR in particular is requested to support the implementation, monitoring and evaluation of this framework through: preparing periodic reports on progress in the implementation; generating evidence-based guidance; supporting countries, including through the national platforms or their equivalent, in monitoring trends and patterns in disaster risk, disaster loss and impacts; convening the Global Platform for Disaster Risk Reduction and supporting the organization of regional platforms for disaster risk reduction; and reinforcing a culture of prevention through advocacy initiatives and dissemination of risk information, policies and practices.

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h) International regional institutions and organizations should be encouraged to enhance cooperation and mutual reinforcement in policies, strategies, instruments and programs for the coherent implementation of this framework, the post-2015 sustainable development agenda and goals, and the climate change agreement, especially in support of developing countries.

i) This framework is open-ended and will be periodically reviewed by the United Nations General Assembly and the ECOSOC every [X] years, through existing review processes, to allow for stocktaking, formulating recommendations for further action, and introducing possible corrective measures.

j) Periodic reporting on progress will be provided by UNISDR for the consideration and to support the deliberations of the High Level Political Forum for Sustainable Development at its sessions under the auspices of the ECOSOC and General Assembly.

## F. Transition phase

29. The activities suggested under the HFA priorities remain relevant and for further implementation in order to maintain the positive momentum and because significant systemic change and impact requires the persistence and perseverance of all stakeholders.

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30. UNISDR will continue to lead technical consultations with countries and experts from international organizations, including the United Nations system, and other stakeholders to complete the ongoing work to review and strengthen the current HFA Monitor, including its indicators, while ensuring continuity with, and use of, data collected thus far. In particular, focus will be on its system of indicators, periodicity and modalities of reporting, and the

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synergy between the global, regional and national monitoring and reporting, as well as its potential synergies with other relevant monitoring and reporting systems, including for the sustainable development agenda and goals and climate change. It will also lead technical consultations in order to update the 2009 Terminology on Disaster Risk Reduction; lead the revision of the United Nations Plan of Action on Disaster Risk Reduction for Resilience; and facilitate the revitalization and transformation of, and [provision of](#) support to, the Scientific and Technical Committee, [and strengthening existing international scientific initiatives focusing on risk](#).

31. Existing regional strategies, plans and programs may be adjusted, taking into account this framework.

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The five global targets provide quantitative outcome indicators to track progress on – reducing mortality, reducing the number affected, reducing economic loss, reducing damage to health and education facilities, and increasing the number of countries with national and local strategies. These goals provide a potentially effective mechanism of connecting HFA to the SDG indicators. This is positive (and commented on below). A trade-off is that the communicating strength of quantitative indicators may attain higher profile than the underlying three goals. This is acceptable if the individual Priorities for Action can lead to the generation clear indicators that in turn can allow some analysis of investment in DRR/M status (Priorities) and outcomes (global targets) and vision (goals). The existing text does not express this ambition, if it exists.

A number of analytical questions are raised by the selection of global goals. It is, for example, welcomed that mortality is included as the first global goal. Despite progress, this should remain our primary motivating goal for risk reduction. More difficult is to measure (and define) people affected, and how to capture relative and indirect economic loss (ie the loss accruing to the poor which is small in aggregate terms but a huge development burden, and the systemic losses that may be larger than direct loss). Number of people affected can be a proxy for livelihood impacts at the global scale and given data constraints this is a reasonable set of indicators at the global level. Nations and cities should be encouraged through wording in the text to include additional measures of output that can better capture relative and systemic loss.

Across the loss goals, the common metric used is to reduce by a given percentage in function of number of hazardous events. No simple measure will provide a bias free indicator, and for analysis at the global scale this is a reasonable trade-off against data availability and the inter-annual variability of loss. Using percentage allows comparison between countries that will have a wide range of absolute stated losses. It will be important to define clearly the ‘number of hazardous events’ and the time frame for accounting. The greater the number of events against which progress is measured, the more representative the measure will be. Similarly while the ISDR may seek countries to return annual progress a better measure that can smooth out inter-annual variability would be a five year moving average. This would help absorb extreme event effects and reveal underlying risk management progress.

Making some clear connection between these indicators and those used in the Sustainable Development Goals (SDG) will be useful to connect agendas and may allow scope for cross analysis of progress, for example on underlying development indicators and disaster loss or risk management capacity. This is especially important given the timing of the HFA II (March 2015) and SDG (September 2015). If potential targets and indicators in the SDGs are not supported in HFA II this may undermine representation of DRR/M in the SDGs (in addition to overlaps, gaps and incoherence). Building a clear connection between the HFA II and SDG processes and expected administrative architectures may also help to institutionalise data collection alongside that required for the SDGs