The Global Risk Assessment Framework Concept Note (Updated 05.2019)

The Challenge

The adoption of The Sendai Framework for Disaster Risk Reduction 2015-2030 on 18 March 2015 (henceforth referred to as the Sendai Framework) articulated the need for improved understanding of risk in all its dimensions and created new requirements and new opportunities for those building societal resilience to environmental and technological shocks. Its fore-runner, the Hyogo Framework for Action 2005-2015 (HFA) was an important instrument for raising public and institutional awareness and generating political commitment, yet over its ten-year duration, disasters continued to exact a heavy toll, with more than 1.5 billion people affected and total economic losses of more than \$1.3 trillion. The exposure of people and assets in all countries increased faster than vulnerability decreased, thus generating new risks and a steady rise in overall disaster-related losses and damage. The decisions that are taken at all scales, in ever more interconnected societies reverberate across interdependent social, ecological, economic and political systems in increasingly diverse and correlated ways. Reflecting this, Member States adopted a scope for the Sendai Framework that was significantly broader than the HFA, to include man-made, as well as natural, hazards and risks. They recognised that now is the time for urgent action to better: understand the multi-dimensional nature of risk; increase accountability for disaster risk creation and propagation; collectively identify interdependent solutions enabling prevention of new risk; reduce existing risk and build back better through risk informed decision making; and strengthen resilience at all levels.¹

The Response

In response to this challenge, the United Nations Office for Disaster Risk Reduction (UNDRR) – mandated to support the achievement of the outcome and goals of the Sendai Framework and the 2030 Agenda for Sustainable Development (henceforth referred to as the 2030 Agenda) – was called upon by experts to establish a process to co-design and develop a Global Risk Assessment Framework (GRAF) to inform decision-making and transform behaviour. This will explicitly support governing authorities, risk professionals and donors and investors, to achieve the global targets of the post-2015 agreements, *inter alia*: the Sendai Framework, the 2030 Agenda, the Paris Agreement, and the New Urban Agenda. It will inform and focus action within and across sectors and geographies by decision-makers at local, national, regional and global levels on the priorities for action set out in the Sendai Framework.²

This Concept Note openly invites all disaster risk reduction organizations, experts and users of risk information to cooperate in the co-design and development of the GRAF, enabling it to catalyse and facilitate the input of information to support collective outcomes and explore open questions in relation to the implementation and alignment of the Sendai Framework and post-2015 agreements. In this conceptualisation phase of the GRAF, an Expert Group (that held its first meeting in June 2018 in Geneva) was tasked with producing initial versions of a GRAF Concept Note, Theory of Change and Implementation Roadmap 2019-2029.

¹ Sendai Framework for Disaster Risk Reduction 2015-2030, paragraphs 3-6

² Sendai Framework for Disaster Risk Reduction 2015-2030, paragraphs 18 and 20

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The GRAF Vision

To improve the analysis and evaluation of disaster risk, and to track progress and identify effective benchmarks to measure achievement of the outcome and goal of the Sendai Framework.

The GRAF Objectives

- 1. To improve understanding of complex risk and concatenating hazards and vulnerabilities in disaster environments.
- 2. To provide decision makers with **insights and access to products, tools, demonstrations and scenarios at all scales** (spatial and temporal) to better understand systems impacts and consequences to prevent risk creation, and to manage and reduce existing and emerging risk.
- 3. To **support decision-makers to maximise synergies** across the implementation, monitoring, follow up and review, as well as achievement of the targets and deliverables of the post 2015 agenda.
- 4. To **build**, and increase trust and confidence in, multi-sectoral risk assessments in an inclusive, evidence-based, open process, building on existing processes, science and data to the greatest extent possible
- 5. To **foster a culture of inclusive, collaborative, and proactive behaviour** based on systems thinking and decision science
- 6. To **mobilize finance and de-risk investments** to enable risk-informed sustainable development

The GRAF Principles

- **Open** open-access, open source, open data, open platforms, analogue and digital access
- **Collaborative** co-creation, co-design, co-ownership, self-organizing, emergent learning
- **Universal** at multiple scales, local-to-global and global-to-local, inclusive, self-sustaining for all users, co-designed for the long-term
- **Trusted** credible, fair, accountable, reliable, with respect and integrity, user experience focus, an experimental space for innovation and iterative development
- Practical re-usable, reproducible, scalable, maximising impact of resources (with due consideration given to other national and international frameworks
- **Transparent** explain all assumptions, "glass box", highlighting the unknown unknowns
- Living with uncertainty evolutionary and transformative, representing uncertainty in complex systems contexts

Background

UNDRR has been tasked to support both the implementation of the Sendai Framework and the followup to DRR-related goals of the 2030 Agenda. In this context, it convened a gathering of 115 leading risk experts in Geneva on 20-21 November 2017. Participating experts included data providers, risk and hazard modellers, as well as experts on exposure, vulnerability and impact analysis, risk communication, application of risk information and end users of risk assessments.

All regions of the world were represented, bringing perspectives from high-, middle- and low-income countries wherein capacities for generating risk data and for risk assessment vary greatly. This enabled a broad examination of current practice and the use of risk information. It explored demand and feasibility for the development of a GRAF that more comprehensively represents the scope of the Sendai Framework and facilitates coherence with the 2030 Agenda, the Paris Agreement and the New Urban Agenda.

The Global Risk Model that was developed by UNDRR for the UN Global Assessment Reports on Disaster Risk Reduction (GAR) 2013 and 2015 and the GAR Atlas 2017, was crucial in supporting the conceptual shift from managing disasters to managing risk (that was subsequently enshrined in the Sendai Framework). It did not however reflect the full range of risks, including small- and large-scale, frequent and infrequent, sudden and slow onset disasters caused by natural or man-made hazards, as well as related environmental, technological and biological hazards and risks that the Sendai Framework has been adopted to address. The meeting recognised that GRAF should provide an opportunity to build on existing practices established in the development of the Global Risk Model, leverage the wider body of work and expertise, and bring forward innovative solutions, working practices and coordination and participation mechanisms.

Principle recommendations

- 1. Access to state-of-the-art risk information through a global risk assessment framework, across the full spectrum of hazards and risks covered by the Sendai Framework, with emphasis on vulnerability, exposure and impact, at relevant and appropriate scale across sectors and geographies, is desirable to enhance risk-informed decision-making.
- 2. There is a need to develop clear short- and long-term deliverables that serve the purpose of assessing and identifying risk, and which ultimately can be made applicable to accelerated reduction and prevention of risk at national and sub-national levels.
- 3. A culture of openness should be engendered, with collective responsibility to optimize existing science and data in open support of the global public good, to realise the collective aspiration to connect systems, understand inter-dependencies and identify solutions at scale.
- 4. Data or information on vulnerability (social and environmental) is recognised as severely underdeveloped and is recommended as a priority area for expanded work. Real reductions in risk will be through understanding and addressing patterns of vulnerability and exposure.
- 5. The GRAF must reach the city level and the sub-local level as development challenges including poverty and unemployment, housing, basic services all tend to be concentrated at sub-local (district) levels, where the impact and consequence of risk preventative / risk reducing action, or inaction is most keenly felt. This mirrors the increased prominence that is accorded to mayors in international efforts to realise the goals and outcomes of the post-2015 agreements.
- 6. The GRAF should be introduced in the GAR in 2019, to show the changes in global risk assessment post-2015, illustrate the evolution in approach to reflect more accurately risk in society, and describe the data and outputs that will be provided by the GRAF and how these could be used for improved decision making.

1.0 GRAF Process

The work to co-design and develop the GRAF recognises that the post-2015 agreements have enormous potential as a framework for engaging Member States and other stakeholders on the risks they face, and where they lag most on reaching the goals. The GRAF is intended to be a crucial component of a comprehensive UN risk assessment and analysis framework in support of the 2030 Agenda and will contribute to the Secretary-General's vision to support decision-making for an Integrated Platform on Prevention as well as within the UN Resilience Framework.

The GRAF co-design is a process focused on improving the capacity of all stakeholders, especially governing authorities, risk professionals and donors and investors and will offer a space for contributions to build a comprehensive assessment across contexts, geographies, sectors and scales of the determinants and drivers of risk. It is a collaborative framework in which science, risk assessment capabilities, impact analyses, risk knowledge and tools provide information for decision-making.

The GRAF aims to improve the understanding and management of current and future risks, at all spatial and temporal scales and across all relevant time periods, to better manage uncertainties and mobilise people, innovation and finance by:

- Fostering interdisciplinary systems thinking, at all scales, with shared metrics and shared understanding.
- Enabling the identification of the interlinkages, relationships, correlations and dependencies of multiple risks and actors across systems.

By providing insights, tools and demonstrations at relevant scales to decision makers on a timely basis the GRAF can build collective intelligence to steer societies towards the outcomes and goals of the post-2015 agreements.

1.1 Developing systems thinking

Approaching risk from a systems perspective to build multi-dimensional maps of the changing risk landscape will help to reveal the interactions between hazards or shocks, exposure, and vulnerabilities, across human, ecological, and economic and financial systems.

To identify systemic risks, one must foster a nuanced approach that is sensitive to multiple risk environments. Since no one entity can capture all relevant perspectives, systemic risks must be assessed through consultations and co-design with multiple parties. Communication is integral to this process. The communication of risk must focus on prompting informed discussion and facilitating decision-making amongst different users through various methods.

Using research, observations, data and risk communications, the connecting and harmonizing of models will improve understanding of the nature and interactions of risks, natural, social or technological. Such analyses should provide insights on the potential impacts and consequences on multiple sectors of society over many scales. In this way, risks can be better understood and managed to minimise loss and suffering of societies, ecosystems and economies - to steer towards and beyond the Sendai Framework, 2030 Agenda, the Paris Agreement, and the New Urban Agenda.

This process will be facilitated by UNDRR, as the custodian agency of the Sendai Framework. It will draw on resources and direction from across the United Nations system to support the GRAF Expert Group - which is supporting the initial stages of co-design.

1.2 Developing a shared understanding of risk

The GRAF will work with all stakeholders to:

- Create a framework and Community of Practice for the understanding and sharing of risk contexts, data, information, science, models and metrics, and risk communication modalities for decision-makers.
- Focus on the provision of decision support options at relevant geospatial and temporal scales (including city-region and national scale), that incorporate sensitivities to changes in risk drivers, as well as an understanding of impact across systems.
- Track progress and identify effective benchmarks to measure achievement of the outcome and goal of the Sendai Framework

1.3 GRAF Delivery Plan

The GRAF Delivery Plan is an evolving road map to achieve its vision and objectives.

As set out in the Theory of Change (see Section 1.3.1), GRAF co-design and development will continue until 2029 in three broad phases of activity:

Phase 1: Design and set up – 2018-2019

This comprises foundational activities to understand the current state of risk assessment science and practice, as well as planning activities and potential projects to be established in Phases 2 and 3. It also establishes the initial practical demonstrators and pilots to test strategic consideration about the scope of GRAF. Working Groups focusing on fostering systems thinking and communication (both communication of risk and the communication strategy for GRAF), as well as mapping existing risk information and gaps will be launched as critical enablers for subsequent activity.

During this phase, including both sequential and parallel activities, the GRAF Expert Group - with support from the Secretariat - will identify priority GRAF Working Group activities to catalyse initial work for scaled-up efforts. These will identify priority GRAF Working Group activities to catalyse experimentation and initial efforts to enable scale-up in Phases 2 and 3.

Phase 2: Building the framework – 2019-2023

Based on the findings of Phase 1 activities, Phase 2 will focus on building the elements and dimensions of the Framework as depicted in the GRAF Impact Cube (see Section 1.3.3) along the three Causal Pathways³ (the People Pathway, the Systems Pathway, and the Science Pathway) as set out in the Theory of Change to work towards the objectives and outcomes of GRAF, including several Working Groups and initiation of a range of demonstrators and pilot projects.

Phase 3: Scaling implementation – 2023-2029

Building on Phase 2 activities, Phase 3 will realise the aspiration and impacts of the GRAF vision. The nature of the Working Groups and projects that will be operational in Phase 3 will be determined through the process outcomes and results of the activities undertaken in the earlier phases.

1.3.1 Theory of change and the GRAF Implementation Roadmap 2019 – 2029

The Theory of Change articulates the characteristics of the GRAF inputs, outputs, outcomes and impacts up to 2029. This live document will be edited by the Secretariat with Expert Group approval.

Version 1.0 below illustrates the early thinking about the development and implementation of key elements of the GRAF. This includes the Causal Pathways (people, systems and science) and the importance of the foundational Mapping and Gap Analysis (see Section 1.3.2.1) in the context of the

³ The Causal pathways are intended to clearly and explicitly define the questions to be addressed and the elements to be tested and established. They are useful in identifying pivotal linkages, dependencies and correlations between various activities in a complex process environment such as the GRAF.

multi-dimensional nature of the GRAF represented in the GRAF Impact Cube (see Section 1.3.3) and the development of the Global Risk Assessment Collaboration Platform. All of which will build on the foundation activities initiated in *Phase 1: Design and set up* (see Section 1.3.2) and the subsequent activities identified as priorities from the Mapping and Gap Analysis and the lessons from the initial demonstrators and pilots.

Theory of Change (version 1.0)



1.3.2 Immediate priorities: Phase 1 – Design and set up

The four Working Groups set out here were prioritised based on consultations in 2017 and 2018 and were subsequently refined by the Expert Group. The prioritisation of these groups will not preclude the establishment of others (the process of which will be outlined in the Operating Model), or projects within them in Phase 1, if approved by the Expert Group.

1.3.2.1 Mapping and Gap Analysis Working Group

The Expert Group was strongly in favour of the immediate formation of a Working Group to develop the scope and Terms of Reference (TOR) for a Mapping and Gap Analysis exercise, for rollout from Q3 2018 to Q2 2019. This analysis informs the focus and level of effort of key topics to be developed in Phases 2 and 3. It maps activities and identifies gaps within the dimensions of the GRAF Impact Cube (notably the different scales including global, national, sub-national and local; hazards, exposure and vulnerability; and the different dimensions of impact and consequence including human/ societal, ecological, economic, infrastructure and political). In the initial phase of GRAF implementation, the focus will be on the national scale with the intention for scope to be expanded through Phase 2 and 3.

The Working Group will determine the specific areas of focus for the analysis that will be identified in the context of the three Causal Pathways articulated in the Theory of Change.

People Pathway

- 1. Identification and mapping of **existing initiatives** that are focused on improving the understanding of risk, including identification of **key data and model organisations and individuals** for GRAF to collaborate with for future development
- 2. Extension and elaboration of existing user requirements, including user stories to develop a representative understanding of potential user needs and user profiles of decision makers, including research and mapping of current initiatives to address known gaps and leveraging the networks of the Expert Group and beyond. This will help to develop a comprehensive and inclusive understanding of the profiles of potential users of GRAF and their needs (existing and anticipated) to build risk literacy and move towards a pro-active culture of decision-making. It will entail both a meta-analysis and direct engagement process to develop a broader set of user-centric metrics
- 3. Mapping of current **capacity building**, **engagement and training** approaches including identification of gaps and mapping of current initiatives to address known gaps and mapping of current approaches to building communities of practice

Science Pathway

- 4. Identification of the status of, and gaps within, current approaches to hazard, exposure and vulnerability data access and modelling. This will investigate coverage, maturity, interoperability, standards, availability and access, data, models and methods to determine physical/ economic, social and ecological vulnerability functions.
- 5. Identification of gaps in current approaches to impact and consequence analysis, keeping in mind the emergent techniques and technologies that may become relevant in the coming years (Artificial Intelligence, crowd-sourcing, prediction markets, etc.).

Systems Pathway

- 6. Identification and mapping of current approaches adopting and fostering **systems thinking and behaviours** including those that focus on interlinkages, coherence, correlations and dependencies across and between systems.
- 7. Identification and understanding of gaps in current approaches to **manage uncertainty** in complex systems contexts.

Organisational design and development

- 8. Identification of **funding models and resources** currently in use for similar collaborative network initiatives.
- Identification and understanding of leading practices for governance and organisational design/ structure for multi-stakeholder, collaborative network initiatives of the type GRAF aspires to be.
- 10. Identification and understanding of leading practices and potentially relevant **IT systems**, **platforms, communication approaches and interfaces.**

1.3.2.2 Fostering systems thinking Working Group

With exposure and losses continuing to rise faster than vulnerability decreases, it is important for GRAF to explore the opportunities for nurturing systems-based approaches to enhance understanding and modelling of risk creation, and solutions.

The Expert Group recommended the establishment of a Working Group to help the Systems Pathway ensure that systems-approaches would be incorporated into the GRAF. This Working Group will propose projects to better understand:

- i. The level of **competence** in systems thinking and systems-based approaches in managing risk, particularly considering the challenges and opportunities inherent in the wider scope of hazards and risks as represented in the Sendai Framework. Projects will explore methods to better represent hazards and risks (including probabilistic modelling, expert opinion, bow-tie analysis and more) as well as the development of approaches to incorporating them into the GRAF outputs
- ii. The basis of decision making which does not incorporate systems thinking and which leads to increasing risk creation, including exploration of the incentives and information typologies used by different types of decision makers and the nature of silos and barriers to interdisciplinarity

- iii. The opportunities for alignment and synergies across the Sendai Framework, the 2030 Agenda, the Paris Agreement, and the New Urban Agenda by fostering systems thinking paradigms
- iv. The drivers of risk creation (societal, ecological, financial and political)
- v. **Systemic risk and transition risks**, potentially using the global financial crisis of 2008 as an exemplar to understand gaps in the current processes and approaches to identifying systemic risk
- vi. The opportunities for systemic innovation, including developing the positive impacts of fostering interdisciplinary systems thinking

1.3.2.3 Demonstrators and pilot projects Working Group

Establishing a Working Group to identify and initiate practical demonstration projects of the GRAF principles and objectives is important in building trust and confidence in the potential of the GRAF in the lead up to the Global Platform in May 2019. These demonstrators will serve as both proofs of concept and examples of the component structures of the eventual GRAF that the framework aims to systematise and make more concrete. On completion of the Delivery Plan, the Working Group and Expert Group may designate some or all of these activities as GRAF projects, beyond the status of pilots and demonstrators.

1.3.2.4 Communication and Information Technology Working Group

Communication of risk information for better decisions

Communication and dialogue is an integral component of effective engagement with decision makers. However, increasing the sophistication and availability of risk information, even in the context of a better understanding of the needs of decision makers, will not support the achievement of the GRAF vision and goal without a new approach to communicating risk. Communication must go beyond providing information to addressing the other barriers to decision-making and action such as risk perceptions, norms and self- and collective-efficacy. The GRAF aims to provide insights and reduce the information load on decision makers. This will require a move from numbers to stories, scenarios, and other strategies that enable users to conduct their own "what if" analysis.

This Working Group will bring together the multiple dimensions of communication, and dialogue between scientists and technicians with decision makers, to facilitate the widest possible engagement with the GRAF through subsequent phases of activity. It will explore and develop ways to help decision makers to understand their risk, and to take appropriate action, including:

- Involving decision makers in the production of risk models, data, and information.
- Giving decision makers tools to experience and experiment with, so that they can run "what if" scenarios themselves and build their capacity to manage risk by 'understanding through doing'.
- Creating risk dialogues between experts and decision makers, the process which can help producers of risk information better understand end-user or decision-maker needs

This Working Group will also build capacity in understanding what risk information can be used for what decision, and the range of decisions that are advisable given the uncertainty in future trends (e.g. trajectories of climate change) and our ability to model them.

This Working Group will also focus on the development of specific aspects of the GRAF operating model, including:

- The communications strategy and activities for GRAF, including the various digital and print channels to communicate GRAF project activity, key meetings and events and other relevant information necessary for advocacy, building a broader understanding of what GRAF is, engagement and outreach
- The GRAF IT Collaboration platform, including summarizing the understanding of GRAF expectations, challenges and requirements for the supporting IT platform and depicting an approach and methodology to identify relevant technology options and definition of a high-level solution design in terms of the overall Operating Model.

1.3.3 GRAF Schematic

The Secretariat has developed a provisional multi-dimensional schematic of GRAF activities (below) that includes the interaction of the GRAF with decision makers, the governance structure, the ultimate impact - sustainable societies and systems. Central to this is the GRAF Impact Cube, a 3-dimensional representation of the matrix of dimensions that GRAF will cover including: the range of scales (global, national, sub-national and local), various impact dimensions (human/ societal, ecological/ environmental, economic/ financial, infrastructure/ physical and political), and the dimensions of risk (hazards, exposure and vulnerability).



Schematic of the possible Global Risk Assessment Framework

2.0 GRAF governance and management

Two principles guide the governance and management structure of the GRAF:

- 1. Governance structure should facilitate and not impede collaboration
 - a. A lean and flat structure with a coordination layer that ensures better collaboration between all GRAF contributors
- 2. Empower GRAF contributors to achieve the objectives with requisite oversight but minimal intervention
 - a. Accountability for GRAF activity, outputs and objectives is allocated to the relevant level and type of GRAF contributor
 - b. A robust but simple reporting framework to facilitate oversight and intervention
- 3. Management of the GRAF Collaboration Platform



Summary Governance and Management Structure⁴

2.1 Expert Group

The initial remit of the Expert Group is to provide guidance and direction in the co-design and collaborative development of the GRAF, including strategic, technical, functional and operational aspects.

The Expert Group guides the co-creation and development of the GRAF Implementation Roadmap, including the establishment, definition and possible composition of GRAF Working Groups required to support the co-design and development process and the execution of the GRAF Delivery Plan.

Convened by the Special Representative of the Secretary-General for Disaster Risk Reduction, the Expert Group meets twice a year in April/ May and October/ November. Members of the initial Expert Group were selected from the responses to a call for Expressions of Interest and are expected to be in position until the 4th meeting of the Group in November 2019, a period of approximately 18 months - equivalent to the co-design and initial development phases of the GRAF – whereupon they may be considered for reselection. During this initial tenure it is expected that the Expert Group will consider future governance requirements.

⁴ Refer to Annex 4 for more comprehensive Governance and Management Structure diagram

All subsequent terms for Expert Group members will be for a period of two (2) years commencing in November. The short term is to build in flexibility and ensure that the appropriate blend of experts can contribute to each stage of the design and implementation of the GRAF between 2019 and 2029, which will by the nature of the tasks and challenges at each stage require a diverse range of skills and experience.

It is intended that Expert Group members will be in position for approximately 24 months to ensure that they have adequate time to contribute to the biennial Global Assessment Reports and at Global Platforms and annual HLPF events.

Further details in relation to the Expert Group are articulated in the GRAF Expert Group Terms of Reference.

2.2 Working Groups and Working Group Leaders

The Expert Group is mandated to establish Working Groups (as described in section 1.3.2) to address, leverage and stimulate activity in key areas at each stage of the co-design and development process of the GRAF. These are expected to cover a wide range of topics which may require only short-term project activity or to be established to explore complex, longer-term. This will necessitate different life cycles of Working Groups; some will be short-term, while others may operate through to 2029. The membership is likely to change over time depending on needs as defined in updates to the Terms of Reference for the Working Group – the definition of which rests with the Working Group

Each Working Group, with approval of the TOR from the Expert Group, will have a call for expressions of interest for membership; once members have been selected, a Working Group Leader will be appointed. The Working Group will meet on a recurring basis (in person and/ or virtually) with a frequency commensurate with the nature and needs of the group.

The Working Groups will identify, support, elaborate, and execute projects in alignment with overall GRAF vision, objectives and principles. Working Group Leaders will be expected to oversee any projects in consultation with the Secretariat.

2.3 Secretariat

UNDRR will host the Secretariat and perform an executive management and coordination role across all activities through the GRAF co-design and development phases. The key role of the Secretariat is to facilitate a shared, trusted, space for multiple partners engaged in the GRAF.

The Secretariat will, to the greatest extent possible, act as a trusted broker to leverage existing efforts. It will also deliver administrative and operational functions to support the activities of the Expert Group, including facilitating the collaborative working environment, supporting Working Groups' activities and projects, taking responsibility for communication with UN Member States, UN system organizations and inter-agency coordination mechanisms. The key functions of the Secretariat include:

- GRAF coordination
- Communications
- Funding and resource mobilisation
- IT management

The Secretariat will welcome secondments of personnel from partner organisations in-kind contributions and funding support to enable the appropriate resources to be available. It is anticipated that as the GRAF matures, some functions and duties currently performed by the Secretariat could be delegated to other organizations.

2.4 Reporting framework

In line with the governance and management principles there should be a robust but simple reporting framework to facilitate oversight and intervention on an exception basis; the following are proposed as the minimum reporting requirements:

- GRAF Expert Group Meeting reports
 - Bi-annual (April/ May and October/ November)
 - o Responsibility of the Secretariat with input from the Expert Group
- GRAF Annual Update
 - o Annual (May)
 - Responsibility of the Secretariat with input from the Working Group Leaders and Expert Group:
 - A 2 to 3-page document to form part of UNDRR Annual Report to include in reporting for the biennial Global Platform and the annual High-Level Political Forum
 - The report will highlight key GRAF achievements and each of the Working Groups over the past year including any significant challenges/opportunities
 - Plan of action proposed for the next phase (1 to 3 years)
 - Funds spent and expenditure forecasted

Working Group progress reports

- o Bi-annual (April and October)
- Responsibility of Working Group Leaders with input from Secretariat and Project Leaders as required:
 - A one-page spreadsheet reporting tool which serves as a snapshot of the status of all projects in each of the Working Groups
 - The report will form the basis of discussion during the bi-annual GRAF Expert Group meetings

All reports to be available on the GRAF IT Collaboration platform.

Annex 1: Expert Group

Expert Group Selection Criteria

The following criteria are used for the selection of the Expert Group to the greatest extent possible:

- Technical and operational relevance to the design and development of the GRAF
- Updated and scientifically sound experience and topic excellence, in the following disciplines:
 - Risk/ hazard modelling
 - Exposure
 - Vulnerability
 - Natural hazards
 - Environmental risks
 - Technological risks
 - Biological risks
 - Human-induced risks
 - Risk communication
 - Disaster-related statistics
 - Uncertainty understanding, management and communication
 - Organisational development
 - Work on the SDGs, Paris Agreement or the New Urban Agenda
- Global geographic experience:
 - County of origin
 - Geographic area of focus
 - o Africa
 - o Americas
 - o Arab States
 - o Asia-Pacific
 - o Europe
 - o Global
- Representation of major stakeholder groups:
 - International organizations
 - National governments and institutions
 - Regional and local authorities
 - Science and research
 - Private sector
 - Civil society
 - Youth
- Gender balance

The UN places no restrictions on the eligibility of men and women to participate in any capacity and under conditions of equality in its principal and subsidiary organs.

Annex 2: Stakeholder focus

There are seven (7) major groups of stakeholders that have been initially identified for the design, development and implementation of the GRAF:

- 1. **UN system**, with a focus on establishing a process whereby they work together to identify regional risks and emerging threats, and to develop regional prevention strategies, focusing on transboundary issues and cross-country issues.
- 2. International organisations.
- 3. National institutions, relevant parties at National scale.
- 4. Local authorities, with a focus on engaging with aggregators of mayors and relevant city authorities including traditional leaders.
- 5. **Private sector**, with a focus on aggregations of insurance, investment and businesses operating in the private sector.
- 6. **Civil society**, including women, youth, indigenous people, NGOs, workers and trade unions, farmers and faith communities.
- 7. **Science and research**, with a focus on networks of science, including both physical and social science, with broad geographical representation and including transdisciplinary and interdisciplinary groupings.