

Science and Technology Advisory Group (STAG)

Data Working Group (DWG): Revised Concept and Action Note - Draft

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Composition of group emergent.

1. Background and Rationale to STAG Data Working Group

The Global STAG Data Working Group (G-STAG DWG) was initiated December 2017 to coordinate an examination of how data is contributing to the expected outcomes of the Science and Technology Road Map across the four Priorities for Action in the Sendai Framework for Disaster Risk Reduction (SFDRR). This is to be accompanied by contributing work of regional STAGS. The Europe STAG (E-STAG) is also currently active on the topic. The G-STAG DWG, hereafter the DWG, proposed to focus on data that enhances implementation of SFDRR for risk-informed development through science-based decision making at local, national, regional and global level. Its scope is the promotion of sensitised, fit for purpose and innovative approaches to data for the science and technology contribution to DRR and risk informed development. This will be consistent with the Guiding Principles of the Sendai Framework for Disaster Risk Reduction (2015), paragraph 19g:

“Disaster risk reduction requires a multi-hazard approach and inclusive risk-informed decision-making based on the open exchange and dissemination of disaggregated data, including by sex, age and disability, as well as on easily accessible, up-to-date, comprehensible, science-based, non-sensitive risk information, complemented by traditional knowledge.”

The DWG is orientated by, and builds upon, existing work currently occurring across the STAG Partnership and other Global Networks and Alliances committed to the goal of the SFDRR. It recognises from the outset that data contributing to the implementation of SFDRR is gathered through wide ranging disciplinary approaches using highly varied methodologies and sources. Data may be numerical, narrative or visual, sourced digitally or otherwise. The DWG acknowledges the essential role of problem based interdisciplinary and transdisciplinary approaches for data capture and analysis as already endorsed by UNISDR and partner institutions (e.g. Tokyo Statement, 2017). It will make advances towards identifying the means to meeting needs for data availability, quality, accessibility, and user application as flagged within the UNISDR Data Readiness Review (2017).

The DWG will seek to enhance the way that the STAG Partnership and member states can promote best practices of data capture and minimum standards of capacity for data sharing at national level. It will identify the issues that are common to the private sector and insurance in their application and sharing of data, also by deepening the knowledge on existing barriers against data interoperability and on how to mitigate them, and the potential contribution this will make to achieving expected outcomes of the Science and Technology Road Map. It will coordinate

perspectives and opportunities for progress towards the goal of SFDRR that are forthcoming through new and emerging technologies.

The synthesis of this work will advocate and incentivise better investment in, and good governance of, the collection, storage, dissemination and recognition of multiple representations of broadly defined numeric, narrative and visual data for DRR. In the interests of understanding the influences of data in DRR implementation and engagement, the DWG will enable impact evaluation inclusive of perception based reactions to risk. This includes identifying where it is beneficial to have standardised data reporting and circumstances whereby data need not be standardised, such as where risk communication issues are occurring across varying cultural and scientific interpretations.

The DWG shares orientations of the work of the Global Risk Assessment Framework (GRAF) towards assessment of processes of risk reduction using data that enables the monitoring of SFDRR indicators and priorities and SDGs; it will support the Sendai Framework Monitor delivery as required by UNISDR and UN member states where possible. A longer term impact will be through progress in enabling improved data for assessment and decision-making. The DWG supports the call from the International Science Council (ISC) for science as a global public good and for defragmentation of science, so that it is more inclusive, integrated and engaged. Through the July 2018 meeting of ISC, UNISDR and CODATA it was proposed that ISC and UNISDR would share the hosting of the DWG in relation to convening, connecting and mobilizing the work of DWG. Linked to this core the DWG hopes to draw upon and support a culture of partnership with organizations and initiatives invited to the group, including for example, Knowledge Action Network on Emergent Risks and Extreme Events now known as RISK KAN, World Data Unions, UN and OECD and regional State Divisions, UNESCO, UNU, UNSD Solutions Network and its Data and Statistics for Sustainable Development: TReNDS network, the Global Partnership for Sustainable Development Data and GADRI.

It is proposed that a driver of the DWG theme will be ‘data for action’, whereby data gathering can be a voice for disaster risk reduction at a local level recognising of the need to improve wider listening to data that becomes more available, transmissible and interpretable by wider groups of decision-makers at all levels. In the long-term this will also improve opportunities for innovation in DRR and sustainability locally, nationally, regionally and globally.

The framework for DWG is underpinned by the Goal of the Sendai Framework for both ‘reduction of disaster risk and losses’ addressing the known needs for improvements in data availability, quality, accessibility and application across the two components. This will be consistent with the expected outcome of the Sendai Framework for Disaster Risk Reduction (2015-2030), paragraph 16 for the ‘*substantial reduction of disaster risk and losses in lives, livelihoods and health and in the economic, physical, social, cultural and environmental assets of persons, businesses, communities and countries*’.

A listening approach is essential in that both the quantification and qualification of disaster as experienced and forthcoming variously remains unknown to user groups. Whilst presented with significant limitations, disaster loss data is already being quantified. However, data that indicates the propensity for disaster impacts on health, society, economies and the environment is more limited. GAPS in data would be addressed and greater effectiveness achieved where data is critically interlinked to underlying causes linked to risk creation. DWG is also concerned with data that indicates the capacity of different stakeholder preparedness and response. As such DWG work will support improvements in:

- i) impact monitoring data (primarily loss related)
- ii) exposure and vulnerability data (primarily risk related)
- iii) emergency preparedness and response data (mitigation, response and adaptation capacity related).

Better understanding and action on interconnections, interoperability and integration of each of these varying origins and contexts of risk and sustainability data can enhance resilience in both disaster recovery and prevention for risk informed development. It is anticipated that the application of quality, accessible and usable data will ultimately support the building up of local resilience and well-being investments that offsets disaster risk. This vision to support a theory of change enabled by the DWG requires recognition of slow and rapid onset disaster data needs, of events that are often a function of complex, multi-hazard, cascading and extreme causality. The DWG needs to therefore address a correspondingly complex data skill and resources development in as accessible a way as possible so that measurable data can improve longer term approaches to management at all levels. There is in this respect a significant role for specialist services of data conceptualisation, compilation, interpretation and dissemination across a multisector environment and that facilitates all of society engagement.

(Figure - concept will be inserted here in due course)

2. Specific Focus Areas

2.1 Bridging the DATA gap and DATA capacity at national level to feed into the Sendai Framework Monitor

A starting point of this focal area will be to incorporate the work outlined by the UNISDR Data Readiness Review as a basis to developing perspectives on national capacity for collection, storage and dissemination, recognising varying representations of numeric, narrative and visual data. This work involves collaboration with the Sendai Framework Monitor focal point in UNISDR. All sub-STAG formations will link into this process to facilitate specific collaboration at the regional level also coordinating with the STAG WG for capacity development. Data that is fit for purpose in decision-making is here seen as a critical issue requiring awareness raising and future technical training. The Sendai Framework Global Target e) to substantially increase the number of countries with national and local disaster risk reduction strategies by 2020 will encourage risk register development in different nation states. This will provide an entry point for analysing varying data practices around the world to indicate where these could be mutually reinforcing to improve progress.

2.2 Identifying the specific data issues for private sector and insurance

The DWG will as a longer-term objective take steps in expanding the potential for cooperation within and between public and private sector domains in identifying focal barriers to progressing data effectiveness in the private and insurance sectors. This will take a much longer period though a limited amount of work is possible within the earlier phases of the DWG. This task will benefit also from the support of sub-STAG formations, such as the Data For Resilience Group of the European STAG which will contribute to identifying and classifying existing barriers against data effectiveness within the European scenario.

The role of the DWG will initially emphasise stimulating debate on ways of transitioning barriers to private sector and insurance data communication in favour of science and technology contributions to SFDRR. This will post Global Platform 2019 include, for example, some steps toward promoting data integration and interoperability for better understanding the nature of transitions possible within competitive business environments and the added value that science can bring.

2.3 Data coordination between different owners of new and emerging technologies

New technologies can be beneficial for supporting the goal of the SFDRR. Specifically, ICT and mobile data generation are powerful resources, albeit the impacts of which are yet incalculable. Meanwhile, in both slow and rapid onset disaster risk settings the recognition of locally grounded 'soft technologies' developed through local action groups can catalyse engagement in risk reduction. There is a need to coordinate and clarify the pathways through which mass data and communication of information, whether evidence based or otherwise, can be orientated to achieving the goal of SFDRR. The DWG will encourage dialogue between the providers of new technologies on the needs of SFDRR. This will include the facilitation of a multi-directional iterative process in addressing the needs of SFDRR in progressing design performance such as for example between providers and users of the data producing technologies. The focus on new and emerging technologies within the DWG that includes high tech developments and those otherwise classified will seek to enable cooperation between active stakeholders across the sector. DWG will interact with the GSMS Association as an early link in this area. The DWG will explore collaboration with leading tech companies and other innovative businesses.

Overall, the DWG aims to not replicate anything of what is already going on but to evaluate gaps and to apply learning and expertise, inclusive of focal aspects of the Science and Technology Road Map to progress towards the Goal of the Sendai Framework and SDGs.

3. Action Plan

3.1 As part of its initial scoping program of activity the STAG DWG has consulted existing networks, organisations and institutions that are overlapping in collection, storage and the means of communication of numeric, narrative and visual data for DRR. This has already included initial coordinating with the wider UNISDR operation, newly formed Global Risk Assessment Framework (GRAF) of UNISDR, the ISC-CODATA initiative, European Research Centre Disaster Loss and Damage Working Group (EC DRMKN), Global Earth Observation (GEO), Integrated Research for Disaster Risk (IRDR), Global Alliance of Disaster Research Institutes (GADRI), WHO and other alliances and networks globally in identifying the composition of the DWG contribution.

3.2 The scoping is ongoing and is assisting in informing about focal points and data related questions within a wider stakeholder group. An initial series of stakeholder informed questions for more systematic research will be further identified building on the UNISDR Readiness Review as initial reference. This will lead to the design of a survey process that goes into more depth regards current strengths, weaknesses, opportunities and constraints in data capacity for the Science and Technology Roadmap worldwide based on regionally implementable consultations. This phase of activity will develop an appropriate predominantly qualitative survey approach.

3.3 The survey will operate through regional partners. It is intended this will not only serve as a means to gather the information needed for the DWG to progress but will also stimulate debate and consequent actions on data capacity amongst respondents. A first milestone will be a synthesis report on data to be issued at the Global Platform 2019 as a basis to developing a longer-term initiative. This will include reference to practice examples with positive messages and encouragement of an ongoing evolution of guidance to countries.

3.4 The STAG DWG members will contribute to this process by addressing questions and compiling perspectives based on their existing engagement with global, regional and national meetings that are orientated to SFDRR and other global targets during the period of the DWG. A wider ambition of the group is to apply the survey with key informants and local stakeholders in all of the STAG regional settings. This will enable initial feedback on results for the DWG survey and evaluative reporting. The process of wider consultation will also enable due attention to a number of suggested systematic topics; these include professionalization of record keeping, operationalization, disaggregated data reporting, the typology being applied to hazard listings, exposure and

vulnerability data monitoring parameters, preparedness and response designations, and the means to overcoming barriers. The underlying theme of the survey will be 'data for action' based on data being a voice for DRR.

3.5 Reporting will combine survey responses, follow up interview input with key informants and identify influential data dialogues between stakeholders. A potentially vast exercise will however be refined to emphasise the distillation of ideas and initiatives informing DRR for sustainable development, questioning and illuminating the means to change. This will lead to the formulation of a draft STAG DWG position statement on data by May 2019 that will be further refined during the Global Platform of May 2019 and beyond in the form of a policy brief.

3.6 Going forward post Global Platform 2019 the STAG DWG will consolidate its support from within the UN system and more broadly with the STAG Partnership and with those it has consulted to stimulate actions on Data for the enhanced implementation of the Science and Technology Road Map over the following two years and ultimately the period to 2030. The strategy will be re-evaluated for performance and then improved upon by the time of the following Global Platform in 2021.

4. Time Frame

4.1 March - July 2018

Initial scoping to assist in the mapping of focal points and data related questions within the wider stakeholder groups.

4.2 August 2018 – January 2019

Design and implementation, based on scoping outcome, of a structured survey of current strengths, weaknesses, opportunities and constraints in data capacity for the Science and Technology Roadmap worldwide.

4.3 January – March 2019

Analysis, mapping of perspectives and strategic opportunities based on survey.

4.4 April – May 2019

Consultation on drafts and preparation of initial output to Global Platform 2019.

5. Deliverables

- Revised Concept and Action Note of the STAG DWG – End August 2018
- Draft survey results and evaluation report of the STAG DWG – March 2019
- Initial output of the STAG DWG presented at Global Platform – May 2019*

* includes position statement for ongoing development of policy brief

6. Resources

This is a long-term initiative aimed at delivering impact towards achieving the goal of the Sendai Framework for DRR and SDGs by 2030. The shorter term target of the DWG is to catalyse a programme of activity that will deliver initial reporting for the group to the Global Platform in May

2019. It would be ideal to recruit a full time Researcher ASAP to assist the group in meeting these targets. Much of the wider work will be desk based and carried out online making use of existing meeting schedules. Following the Global Platform 2019 the DWG is likely to need to acquire full time secondments of senior staff from the DRR Science and Technology sector into this work.

7. Logistics

A current proposal is that the G-STAG DWG is jointly hosted by UNISDR and ISC whilst being Chaired by its wider membership. All relevant partners currently embedded with UNISDR and ISC together with the allied specialist institutions will therefore become linked into this global initiative.

8. Communication strategy

Under discussion