

REPORT ON THE GLOBAL WEATHER ENTERPRISE SEMINAR

Introduction

A Global Weather Enterprise (GWE) Seminar, organised by the World Bank Group in collaboration with the World Meteorological Organisation (WMO), was held in Washington DC on 28 November 2017. Participants from across the public, private and academic sectors were invited to the Seminar to discuss the opportunities and risks associated with the future of the GWE. Around 70 GWE leaders from the three sectors participated in the event with World Bank staff acting as rapporteurs. The Seminar was facilitated by the American Meteorological Society.

This report on the Seminar provides a summary of the outcome of discussions that took place on 28 November 2017. It does not provide contextual and background information about the Global Weather Enterprise. Nor is it a statement of policies or of how the GWE should evolve over the coming decades. It provides an aide memoire of the main outcomes of the discussion.

In particular, the plenary “next steps” discussion in the afternoon of the Seminar attempted to isolate a number of key points and a number of possible actions that could be pursued following the Seminar. This report provides a summary of these points and actions; after the Seminar a draft of this report was circulated to participants and this final text has greatly benefitted from their feedback. The organisers take responsibility for this Seminar report and whilst every effort has been made for accuracy and clarity any remaining errors will be theirs alone.

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Opening Remarks

In opening the Seminar James Close, Director of Climate Change Global Theme (World Bank) said: “The Global Weather Enterprise is going through a major structural change due to: rapid development of technologies; public-sector funding being under pressure; the needs of the society requiring more accurate and reliable hydro-meteorological information to protect people and property from increasing hazards and climate change. All these factors suggest that the Global Weather Enterprise should grow substantially over coming years. Recognizing the importance of this sector for strengthening resilience and adaptation to climate change, the World Bank has significantly increased its support to national meteorological and hydrological services in developing countries. Since 2010 our hydro-met portfolio increased from 25 projects with total funding \$270 million to 67 projects with funding reaching \$900 million. Still it is not enough and we believe that larger scale and more efficient engagement between the public and private sectors is essential, and inclusion of academia in this process is critical too.”

In his opening remarks Petteri Taalas, the Secretary-General of the World Meteorological Organisation, said: “WMO is an organization of 191 Members, which have given WMO mandate to be the global authoritative organization specializing in weather, climate and water. The WMO permanent representatives are appointed by the governments to represent the interest of their countries including the private sector. The success of WMO has been based on free exchange of high quality standardized observations and of scientific and technical know-how worldwide.

The private sector has always been a part of the WMO, and is expected to be so in the future. WMO is interested in playing a leading role in engaging private sector service and measurement actors in its activities. This engagement is expected to speed up within the coming months. WMO has a dedicated secretariat and consultant resources to accomplish this. WMO is Interested in hearing concrete proposals from private sector on how to become more engaged in WMO activities.”

On behalf of the organisers, David Rogers and Alan Thorpe welcomed participants to what they referred to as a landmark event. They noted that this was perhaps the first gathering of its kind of the leaders in the global weather enterprise from across the public, private and academic sectors who are responsible for the provision of the world’s weather information. They described the motivation for holding the Seminar and that participants would be discussing the opportunities and risks associated with the future of the global weather enterprise with an emphasis on collaboration between the public, private and academic sectors. Time was devoted to discussion of the next steps that participants believe should be taken following the Seminar.

William Hooke from the American Meteorological Society facilitated the Seminar. He opened proceedings by describing the modus operandi reminding participants that, aside from the opening remarks, it was being held under the Chatham House rule.

The GWE Seminar discussed a number of key characteristics of the enterprise as follows:

- The goal of the Global Weather Enterprise is to provide accurate, reliable and timely weather and climate related information that contributes to the safety of life and property, poverty reduction, and the promotion of economic development. This goal is fully aligned with the requirements of the universally-agreed Sustainable Development Goals and Agenda 2030¹.
- The GWE is contributed to by organisations and individuals in the public, private and academic sectors. Enhanced cooperation and partnership between the different players is recognized as being needed to realise the socio-economic benefits produced by the GWE.
- Crucial for delivery of the GWE goals is advancing the science and technology and equipping the next-generation with appropriate skills. The academic sector, strongly supported by both the public and private sectors, plays a major role in these areas.
- There is agreement that a pathway for the GWE to grow in size and scope over the period to 2030 and beyond is both an essential and realistic goal: essential because of the growing societal needs for weather information (as described inter alia by Agenda 2030) and realistic given recent trends and new (scientific and technological) opportunities emerging.
- Whilst the enterprise is fundamentally global and collaborative in nature, regional and national variations need to be factored into any actions related to the GWE.
- The GWE fundamentally involves a value chain linking observations, numerical weather prediction, analyses and forecasts, and the end use of derived weather information. The GWE has been very successful in delivering increasing quality weather information that helps save lives and property. It is a goal of the GWE to maximize value for all along the value chain.
- There is a discernible move from the provision of capital-based infrastructure (e.g., observing technology hardware) to a service-based approach (e.g., provision of data services); this will have a significant impact on the GWE.
- There are a number of opportunities and risks associated with the advancement of the GWE and delivery of its goals. The integrity and success of the GWE is threatened without action being taken to realise the many opportunities and mitigate risks that lie ahead.

¹ <http://www.un.org/sustainabledevelopment/development-agenda/>

The GWE Seminar identified some key actions that need to be taken:

1. *Improving collaboration and building trust within GWE:* Any lack of clarity in the respective roles and responsibilities of the different actors would contribute to mistrust and will need to be resolved if the full potential of the GWE is to be realised. Consequently, the threat of the GWE not delivering what society needs will be greatly diminished by enhancing the mutual respect and trust across the sectors; this will come from greater dialogue and understanding leading to action. In this regard, the GWE stakeholders need to act quickly – they have been too slow in the past to address issues that would improve the collaboration between the public, private and academic sectors.
2. *WMO process on the GWE:* The World Meteorological Organisation committed itself to accelerate its process aimed at enabling better integration and collaboration of the public, private and academic sectors that contribute to the GWE, including preparation of a relevant policy act for consideration by the World Meteorological Congress in 2019.
3. *Working Group on the GWE:* Arising from the seminar, an ad-hoc Working Group should be created that would provide the public, private and academic sectors with a neutral forum to help improve dialogue and understanding across the sectors as they pursue the goals of the GWE. It would be fully aligned with the WMO process. The appropriate model is being progressed by World Bank, WMO and other parties following the Seminar. Input from Seminar participants is being solicited. The WMO session at the AMS meeting in January 2018 will be an opportunity to refine the model.
4. *Socio-economic scenarios:* Not least because there are sources of finance that now exist and are as yet untapped, it is important to investigate economic incentives and disincentives for the GWE. For this a socio-economic study is needed carried out by reputable experts to analyse potential scenarios for the successful growth and development of the GWE.
5. *Data access and exchange:* As wide as possible access and exchange are needed for both public and private sources of data; in this context, review of WMO Resolutions 25, 40 and 60 is probably needed. A goal for the GWE is to make weather information as freely available as possible to those who currently do not have access or cannot otherwise afford it, such as in low and middle-income countries.
6. *Business models for data services:* Business models (and their risks for different actors) for sustainability of public and private data services need to be explored; within that an issue to be addressed is exploration of the consequences of the ownership of data.
7. *Diversity amongst countries:* Actions such as devising suitable partnership scheme(s) should take into account the heterogeneity amongst countries using the principle that no-one is left behind.