



IFMS Webinar
8 October 2020

WMO Public-Private Engagement And Open Consultative Platform

**Next Generation of
Weather and Climate Intelligence**

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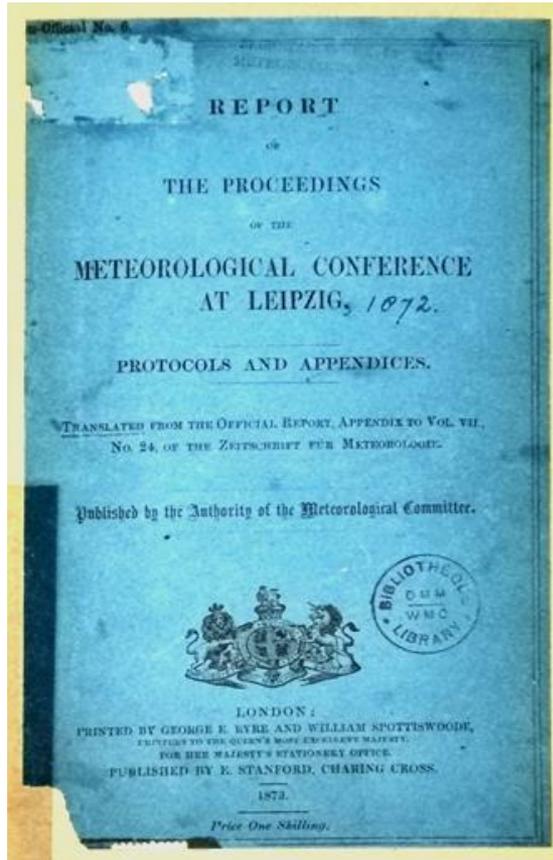
Objective of this talk

Why, What and How of the PPE (in WMO context)

PPE = Public-Private Engagement

Engagement with the private sector (or business sector) refers to any type of interaction with private/business entities, with different objectives, ranging from informal talks and discussions, to knowledge-exchange platforms, to full-fledged partnerships entailing funding or brand asset exchanges. These engagements may be implemented through different modalities, including but not limited to partnering, and may entail different levels of public exposure.

The beginning ...

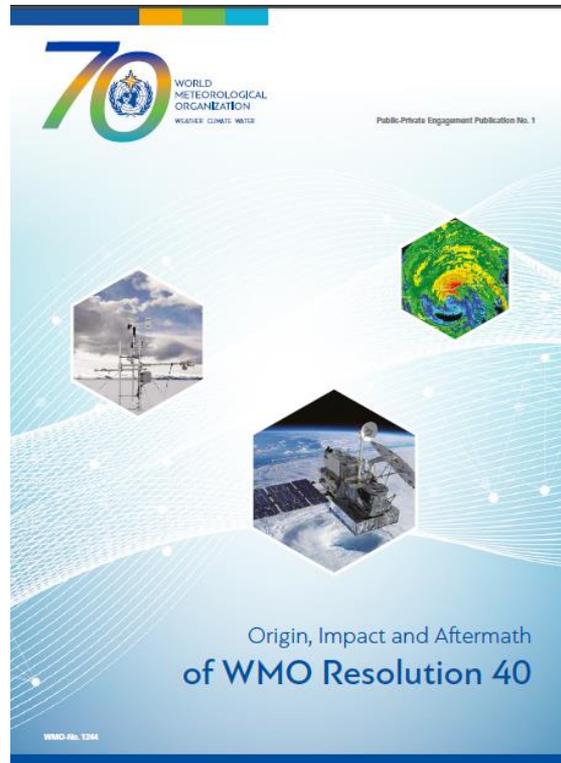


*"We venture by the present circular to invite the heads of **Meteorological Institutes, the Meteorological and other Learned Societies, as well as private scientific men and practical observers in the domain of Meteorology, to this consultative meeting, which is to be held in Leipzig ...**"*

*From the invitation letter to the Meteorological Conference at Leipzig, **August 1872***

Note: Leipzig Conference (1872) prepared the way for holding, in Vienna in 1873, the First International Meteorological Congress, which was the first step towards the establishment of the International Meteorological Organization (IMO), the predecessor of the WMO

... several decades later... ‘data wars’



- Commercialization
- “By the mid-1980s, tensions were developing on many fronts with some NMSs introducing heavy charges, including to their national academic and private sectors, for previously free data. Some also began restricting the flow of their World Weather Watch data to their neighbours, to prevent potential customers from obtaining for free from other countries the data and products that they needed to sell.” J. Zillman
- Resolution 40 (Cg-12, 1995) – policy and practice for international data exchange

Drivers for Public-Private-Academic Engagement

Agenda 2030 / Sustainable Development Goals (SDG)

Calling for engagement of non-state actors

Sendai Framework for Disaster Risk Reduction 2015-2030



“...There is a need for the public and private sectors and civil society organizations, as well as academia and scientific and research institutions, to work more closely together and to create opportunities for collaboration ...”



Paris Agreement

Public-Private sector participation is recognized as a key for integrated, holistic and balanced non-market approaches to assist in the implementation.

Drivers for Public-Private-Academic Engagement

*Changing environment,
increasing risks*

**New
business
models &
opportunities**

**Progress
in Science**

*Rapidly
changing
technologies*

**Growing
demands for
information
and services**

**Public
budget
constraints**

Awareness – Understand issues

- Main issues between the public and private sector:
 - Engagement in the value chain – evolving with the technology and demand
 - Data ownership and data sharing
 - Roles and responsibilities
 - Funding, business approaches, markets
- Complaints from both sides: unfair competition, monopolism, protectionism, quality
- Net result – erosion of trust, barriers to achieve the full potential of the enterprise in the interest of society

Awareness – Understand diversity

Public sector

- Various institutional arrangements, legal frameworks
- Business models, economic parameters
- Roles and responsibilities of NMHSs (e.g., with regard to hydrology, aviation ...)
- Commercial (for-profit) spinoffs

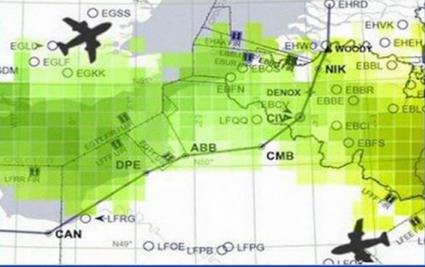
Private sector

- Sub-sectors: equipment manufacturers, system integrators, media, service delivery, data brokers, observations, IT providers, consultants, (phantoms), ...
- Size – from individuals to hundreds of employees
- Operations – local, national, regional, global
- Non-profit spinoffs

Awareness – Understand dynamics

- **Accuweather** - the business is worth as much as \$900 million; annual revenues exceed \$100 million
- **The Weather Company** (founded as The Weather Channel in 1982) was bought by IBM for \$2.3 billion in 2016 (together with WSI and Weather Underground)
- **DTN** was purchased by a Swiss holding company for \$900 million in 2017; recently DTN acquired the MeteoGroup
- **Vaisala** has acquired the professional business-to-business (B2B) weather services from Finnish weather forecast services company Foreca Oy
- Start-ups and spinoffs

ClimaCell
Founded: 2015 by CEO Shimon Elkabetz
Hyperlocal forecasts using data from cellphone towers and street cameras
Number of employees: 100
Money raised: \$77 million



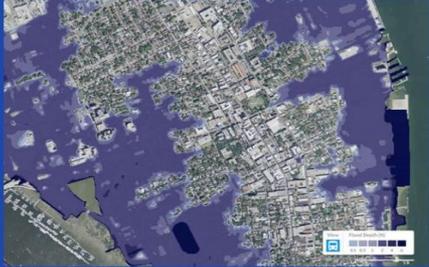
"What we're doing is revolutionary. We're changing the paradigm."

Saildrone
Founded: 2012 by CEO Richard Jenkins
Sensor data from oceangoing robots produces unique forecasts
Number of employees: 100
Money raised: \$90 million



"The ocean is driving our weather, and both the climate and the oceans are changing rapidly. We have to understand that."

Jupiter Intelligence
Founded: 2017 by CEO Rich Sorkin
Combines weather, climate and terrain data to create geographically-specific risk profiles
Number of employees: 50
Money raised: \$33 million



"Understanding climate risk is one of the biggest challenges for the planet."

Awareness – Understand economic aspects

Scoping and monitoring trends and developments within and across the sectors, including:

- Weather and Climate Services Market
- How the sectors operate and how successful partnerships can be built
- Economic factors

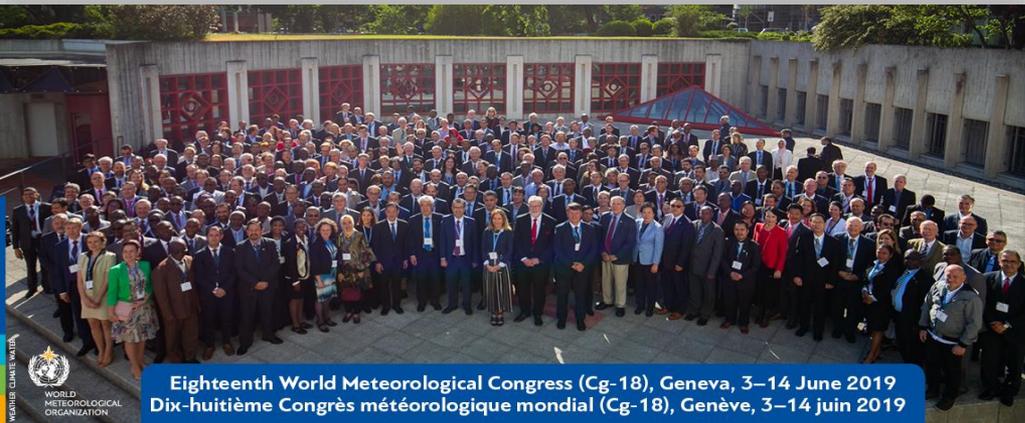
- Total amount spent globally in 2014/2015 in Weather and Climate Information Services (WCIS) reached more than \$56 billion
- Estimate of annual public funding for national meteorological services globally of \$15 billion
- There is a significant and vibrant economic sector for commercial WCIS beyond freely available publicly funded weather and climate data
- WCIS are a small but significant sector of the global economy, which we estimate to be of the order of 0.07% of the global gross domestic product (GDP)

As 70% of firms in industrialized countries are exposed to everyday weather anomalies for a total amount of sales ranging from 25-35% of annual GDP, **unfavorable everyday weather can destroy up to \$500 billion in the U.S. and €400 billion in Europe each year.**

WMO PPE policy

Geneva Declaration 2019:

Building Community for Weather, Climate and Water Actions



Eighteenth World Meteorological Congress (Cg-18), Geneva, 3–14 June 2019
Dix-huitième Congrès météorologique mondial (Cg-18), Genève, 3–14 juin 2019



A policy act that reflects the **new paradigm of cooperation and partnership** between stakeholders from all sectors of the weather enterprise needed as a collective response to global societal risks related to extreme weather, climate change, water scarcity and other environmental hazards.

Geneva Declaration 2019:

Building Community for Weather, Climate and Water Actions

1999:

We EXPRESS deep concern

about the potential impacts on the provision of meteorological services worldwide **of any development which endangers** the unique and integrated international system for obtaining and exchanging meteorological and related data and products, a system which has benefited the global community for over 100 years. **These developments can adversely affect the effective and efficient provision of appropriate meteorological data, information, products and services, as well as the role and operation of National Meteorological and Hydrometeorological Services,** resulting in unfavourable impacts on national economies, the environment, the well being of peoples and the whole world community.

2019:

We WELCOME

- **The opportunities for all stakeholders** and the broader user community that will result from a closer collaboration among public, private and academic sectors;
- **The engagement of all sectors in addressing the societal needs** through weather, climate, water and other environmental information and services;
- **The contributions of Members and partner international organizations** to sustaining and developing the global meteorological infrastructure coordinated by WMO through its programmes;
- **The evolving role of WMO as a facilitator in establishing and expanding partnerships among stakeholders, from public, private and academic sectors ...**

Open Consultative Platform

Theme 1

Data and ...
more
(shared)
data.

Theme 2

Forecasting
and
forecasters

Theme 3

Demand and
Supply of
Services ...
Weather /
Climate / Water
/ Environment
intelligence
driving
decision-
making

Theme 4

Capacity Gap
– Alleviating
inequality
and
advancing
together

Theme 5

Roles,
Responsibility,
Partnerships
for common
action

High-Level Round Table for the Launch of the Open Consultative Platform (OCP)
5-6 June 2019, PALEXPO, Geneva, Switzerland



Assistance to Members

- Regional Associations to be engaged in monitoring the developments of their respective regions
- Regional conferences and training workshops on PPE for senior NMHS managers of NMHS
- Guidance on evolving Role of NMHS:
 - Regulatory role
 - Competent authority for certification of operators
 - National dialogues (examples: US, Japan, China, ...)
- Sustainable business models - break misconceptions (e.g., the NMHS in poor countries will survive through selling data)
- Financing models and Strategies
- Legal frameworks – new guidance to be provided based on analysis of existing national frameworks

Promote Innovation

- All parts of the value chain are undergoing major transformations
- PPE/OCP will focus on innovative service provision with showcases of partnership
- Examples of good practices, regular PPE Newsletter
- <https://public.wmo.int/en/our-mandate/how-we-do-it/public-private-engagement-ppe>
- WMO International Weather Apps Awards (WIWAA) – a new idea to be realized in cooperation with HMEI, IABM and Uki Media
- <https://ppe-openplatform.wmo.int/en/awards2020>



KEY MESSAGES

- PPE is a strategic direction of the Organization – requires an Organization-wide cultural change and behavior
- The right balance between public interest and industry growth should be pursued
- Both risks and opportunities should be considered in relevant activities, projects and partnership agreements
- WMO should sustain its position at the forefront of the enterprise building on its strong foundations
- WMO need to maintain stakeholders' confidence with agility, prompt actions and innovation

THANK YOU

<https://ppe-openplatform.wmo.int/>

Your feedback and contribution are welcome to
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