

PARTNERSHIP & INNOVATION FOR THE NEXT GENERATION OF WEATHER & CLIMATE INTELLIGENCE

# HIGH-LEVEL ROUND TABLE

Day 1

1:00 to 2:30 p.m. 5 - 6 June 2019, PALEXPO, Geneva, Switzerland

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

#### **Objective**

The OCP will help articulate a common vision for the future of the weather enterprise in the coming decade and beyond ...

... a primary vehicle for dialogue between the public, private and academic sectors, as well as the civil society ...

... a mechanism for addressing collaboratively the grand challenges before the weather enterprise in an open, constructive and participatory way.

The main objective of the Open Consultative Platform will be to foster cross-sectoral, interdisciplinary and longterm approaches. It will identify and address key global challenges and their impact on the weather enterprise stakeholders and users. It will aim to build consensus on common approaches to governance and policy by:

- Scoping and monitoring trends and developments;
- Deepening understanding of the drivers and enablers of the weather enterprise and impacts on global systems;
- Informing strategic initiatives by stakeholders;
- Highlighting the implications of these dynamics for decision-makers.



#### Arrangements - Day 1

- "Mini-panel" under each theme, followed by a brief summary
- General summary of the day
- Plan for a joint statement

- Speakers are kindly requested to keep the interventions short
- Open line for questions and comments by email to ppe@wmo.int



#### **Pre-event questionnaire summary**

**Q1:** Use your knowledge, imagination and sixth sense and try to envision how the weather /climate/ water/ environment information and services in 2030 will be different to today. Outline three major advancements you can foresee.

**Q2:** Which problems or barriers that exist today need to be resolved by working together in order to achieve the vision you outlined above?

Theme 1: Data and ... more (shared) data

Theme 2: Forecasting and ... forecasters

Theme 3: Demand and Supply of Services ... W/C/W/E

intelligence driving decision-making

Theme 4: Capacity gap ... Alleviating inequality and advancing

together

Theme 5: Roles, responsibilities ... Partnerships for common

actions







## Theme 1: Data and ... more (shared) data



"Data rights and exchange rules need to be resolved globally with WMO leadership"



#### By 2030 -

"exponential increase in the available observations including expansion of in-situ and remote sensing observations as well as observations from non-conventional platforms and sources (e.g. unmanned systems, crowd sourcing, etc.)"

"sensor explosion"

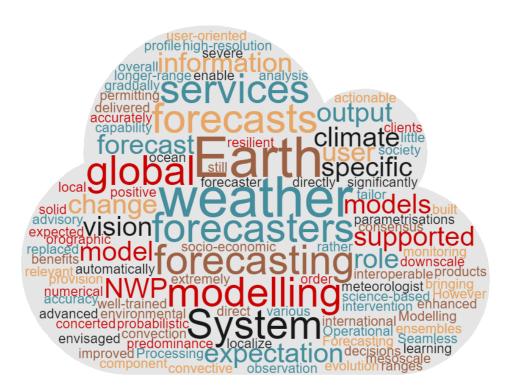
"data revolution"

"a flood of new observations"

"IoT and AI"

"step change is needed in observing and understanding oceans and cryosphere".

## Theme 2: Forecasting and ... forecasters



"Models based on Earth system science, fullycoupled ensembles based on A.I. supported extraction of useful information for decision makers."



#### By 2030 -

"a science supported and user driven seamless Earth system modelling capability is built on a global level

"predominance of probabilistic Earth monitoring and forecasting, with relevant user-oriented products"

"The role of forecasters would change significantly"

"Real time to decadal prediction of all key phenomena at microscale resolutions in space and time available to anyone, anytime, anywhere"

# Theme 3: Demand and Supply of Services ... W/C/W/E intelligence driving decision-making



"Going beyond the forecast to "decision makers". Impact-based Decision Support Service (IDSS) as the predominant service model and AI or machine learning becoming part of our tool box"



#### By 2030 -

"everybody will be informed of the weather which may impact their life in the individual situation, such as daily home life, tourism, health, etc., through the best media and in the best format for the situation."

"weather services will be more diversified and detailed to meet the specific needs and requirements from industries, and more new meteorological businesses will be widely born."

"service delivery will be done jointly by public and private entities"

#### **WMO Value Proposition for the OCP**

- Policy: Geneva Declaration 2019; OCP Inclusive, open and transparent mechanism to discuss issues raised by all sectors and build common vision
- WMO as convenor and facilitator
  - ✓ Dedicated events for communities of practice, e.g., Global Data Conference 2020, regional conferences/workshops with participation of all sectors
  - ✓ Annual OCP high-level events
- Work streams for authoring position/white papers on selected challenges and issues to inform decision making
- Engaging actively private and academic sectors in:
  - ✓ new WMO Technical commissions
  - ✓ new WMO science, innovation, and science-fo-services initiatives (through Research Board)
- Identification of good practices in public-private cooperation models, elaborate on ethical behaviour; workshop in first half of 2020
- Secretarial support



# A joint statement to establish the OCP **Zero Draft**

We, the public, private and academic participants at the High-Level Roundtable, welcome the opportunity to collaborate toward:

- Strengthen partnerships by creating and convening the OCP...
- Identify and address key global challenges and their impact on the global weather, climate and environmental enterprise...
  - e.g. starting with 5 themes, challenges we identify here...
  - Develop common position for prioritized challenges
  - Convene global for a to collectively tackle the challenges (e.g. Data Conference)
  - Counting on WMO's value proposition !!
- Set the representative voice of global weather, climate and environmental enterprise
  - Closely link to the global decision-making process and sectoral implementing power





# See you tomorrow!

# same place same time different themes

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# HIGH-LEVEL ROUND TABLE

Day 2

1:00 to 2:30 p.m. 5 - 6 June 2019, PALEXPO, Geneva, Switzerland

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

#### Summary – Day 1

#### Theme 1: Data and ... more (shared) data

Sue Barrell, Alain Ratier, Oystein Hov, Jim Andersen, Gerhard Adriaan and Kjell Forsen. Summary by Petteri Taalas

#### Theme 2: Forecasting and ... forecasters

Florence Rabier, Kevin Petty, Tim Palmer, David Parsons, Karl Gutbrod, Sarah Jones and Jay Trobec. Summary by Pavel Kabat

# Theme 3: Demand and Supply of Services ... W/C/W/E intelligence driving decision-making

Naoyuki Hasegawa, Andrew Eccleston, Ralph Renner, Christophe Cudennec, Agens Kijazi, Young Yu, and Michel Jarraud. Summary by Louis Uccellini



### **Email Reception Day 1**

"... our world of <u>data</u> is changing radically with a far greater role for private enterprise as a data provider and the growth of crowd source data."

- Availability, accessibility, transparency, and reliability (especially for social and humanitarian safety)
- Enhanced data sharing will likely require enhanced incentives
  - Definition of data to go beyond obs (real time, archives and metadata!) to include the sharing of forecast products
  - Concerns on limited availability of weather data in certain regions/sectors... Differences
    must be put aside for greater good: Realizing data sharing is more than just individual
    plays.
  - **Specific and measurable steps**, after initial discussion, are critical a new framework for Weather Data Exchange to enhance data sharing between three sectors?
- Data could be managed and shared more efficiently by:
  - Developing better acquisition systems; reinforcing WWW and existing networks
  - Continuous conversations on the data issues and exchange of data (\*WMO Data Conference)
  - Reviewing data policies of WMO and other national/regional ones respecting the spirit of Resolution 40 (Cg-XII).
- Research access to public and private data: good example of Norwegian Met Service, TIGGE...



### **Email Reception Day 1**

Great societal consequences and impacts of W/C/W/E events and associated information/services:

"Social demand of improved services is largely underestimated..."

- "The private, academic/research, public sectors, NGOs, and stakeholders to form an authoritative, single voice to articulate to the general public and decision makers that efforts to advance weather prediction and the utilization of weather products require cooperation between all three sectors and are one of society's most critical and underfunded needs. "
- Future of many Met. Services relies on how to best implement the MET Value Chain...
  - Toward a user-oriented weather enterprise
  - Innovated thinking to develop strategies and business models: Reset priorities,
     Public-private engagement focused to increase quality and quantity of information/services...
- To engage broader community to ongoing and planned activities (e.g. GFCS Monitoring, Evaluation, and Learning Framework to Strengthen Climate Service)



### **Email Reception Day 1**

OCP to foster mutual understanding and trust, to frontier successful practices...

- All stakeholders collaborate toward protecting people, thriving society: All involved parties to stand for people-centred, society-centred thinking.
- Discussion at OCP should be linked to not only global but also national decision-making.
- Share and complement experience of GEW Forum and other initiatives.



#### **Arrangements – Day 2**

- "Mini-panel" under each theme, followed by a brief summary
- General summary of the day
- A Way Forward including a joint statement

- Speakers are kindly requested to keep the interventions short
- Open line for questions and comments by email to ppe@wmo.int



#### **Pre-event questionnaire summary**

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Theme 4: Capacity gap ... Alleviating inequality and advancing

together

Theme 5: Roles, responsibilities ... Partnerships for common

actions







The summary of the survey is available at: https://ppe-openplatform.wmo.int --> News & Events

# Theme 4: Capacity gap ... Alleviating inequality and advancing together



"Loss of application of indigenous knowledge due to selective globalisation i.e. dominance of knowledge/value of other regions/countries; disproportional access to resources and technology".

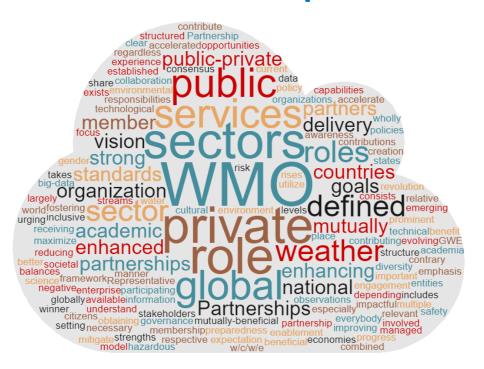
In 2030, "the capacity gap between the developed and developing world has decreased substantially and forecasts supporting the fundamental protection of life and property are available worldwide"

"The dependencies between, on the one hand, weather, water, oceans, climate and pollution, and on the other, the risks and value associated with food, health, energy and transport availability should be made obvious to everybody".



"Governments awareness of the risks of meteorological disasters and their capabilities in disaster prevention still inadequate".

# Theme 5: Roles, responsibilities ... Partnerships for common actions



"High-level dialogue at appropriate fora is needed to facilitate a policy shift. Discussion there should be aiming at maximizing the countries' benefits, not the benefit of any particular sector or entity" In 2030, "structured global partnership with clear roles, responsibilities and contributions in delivery of services".

"Representative diversity, especially of gender, in the delivery of w/c/w/e information and services and in the governance and working bodies of WMO".

"Integrating the private sector (and academia) fully into WMO process so that regulations, standards, guidelines, competency frameworks, etc. are developed in coordination with private sector experts"



"Misunderstanding and a lack of trust still exists between the public, private and academic sectors of the weather enterprise."

#### A way forward (to affirm through a joint statement)

- Establishing and participating in the OCP
  - <u>Inclusive</u>, <u>open</u> and <u>transparent</u> mechanism to discuss issues raised by all sectors and to build common vision
  - Focus on partnership in addressing 'grand challenges'
  - Stimulate exchange of views and information to foster mutual understanding and trust
  - Complementary to and embracing existing initiatives
  - Enabled by policy (Geneva Declaration 2019)

#### WMO role as a convenor and facilitator

- Sustainable dialogue between the sectors at appropriate level
- Linking with regional and technical activities and promoting participation of all sectors
- Secretariat support for OCP processes; outreach through WMO channels



#### A way forward (to affirm through a joint statement)

- Identify challenges and positions
  - OCP should recognize the value of the entire chain of W/C/W/E and benefit of the chain involving all actors
  - For the major themes identified in the Roundtable, OCP will develop workstreams to address challenges and to formulate common positions.
  - Identification of good practices in public-private cooperation models, elaborate on ethical behaviour; workshop in first half of 2020
    - ✓ Dedicated events for communities of practice, starting with the Global Data Conference 2020
    - ✓ Formulating Best practices, identifying lessons learnt
    - ✓ Regional conferences/workshops with participation of all sectors
    - ✓ Annual OCP high-level events



#### **Next Steps (tentative plan)**

#### Until +1 month:

- A summary of the High Level Roundtable (also informed to the WMO Cg-18)
- Consultation and agreement on a joint statement, based on the agreed "way forward": please communicate your feedback/comments/agreement.

#### +1 to +12 months:

- Elaborate the 'production process' formation of initial "workstreams", with open participation and led by volunteers (up to ~2 years)
- Develop positions/white papers and next steps for joint actions

#### • +12 months

- Global Data Conference 2020
- Next OCP High Level event June 2020





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## Thank you!

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