



# WMO DATA CONFERENCE

EXCHANGE OF EARTH SYSTEM DATA  
IN THE 21<sup>ST</sup> CENTURY

#WMOData

16 - 19 NOVEMBER 2020  
VIRTUAL CONFERENCE

## Main outcomes general:

- Benefits are linked to economic possibilities of services
- Budget and revenue from selling data is an issue, there need a sustainable solution and a new business model. GBON and SOFF are examples for meteorology.
- Technology is only a part of the problem, policy and funding are required.
- WMO can provide support for data sharing systems, including common data format
- Permanent monitoring structures are needed
- What about "non-governmental" data ?
- If data is not measured then Services can not be punished for not sharing



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## Main outcomes of Key discussion topic 1&2:

- National and regional data exchange is needed. At regional/global level other scales are relevant and need to be discretized accordingly
- Formats and standards are needed (Water ML2)
- Especially for global data sharing, a prioritization is required.
- Timeliness and time scale to define as well (daily, monthly, etc)
- Political will is an issue -> resulting in imbalance of investments and benefits
- Products need to be developed at national and regional levels to facilitate cooperation
- Data already shared, especially for research; commercial activities related to specific legislation



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## Main outcomes of Key discussion topic 3:

- 1 Identify data that have an impact on society and prioritize them.
- Data to be shared include historical data
- Data type must be defined according local needs, WHYCOS to be implemented to addressing these needs.
- Lack of funding restrains data collection and hence data sharing.
- Data must be checked and well described (metainformation to be shared as well, data format and standard to be used)
- (from chat: recommending hydrologic modelling products for use in broader earth systems modelling work important as well)



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## Main outcomes and conclusion of the workshop:

- There are good examples, e.g. in latin America, for sharing data and showing benefits (win-win situation): motivation is key.
- A new business model is required for installation and maintenance/operation of measurement network, and the related political will
- Capacity building is necessary
- It is a key to demonstrate benefit of sharing data, showing how data impact society, at all scales, increasing political will



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## Main outcomes of Key discussion topic 1:

- 1 Sharing data is important for improving flood forecast accuracy
- 2 Benefits of sharing data might be clear, but some countries have problems sharing data for security reason. Separate discussion with those countries should be considered
- 3 Inflows from upstream are essential for water management but often unknown
- 4 In many countries, data are collected by different institutions, national and UN coordination is required . A unified data policy can help engaging with different stakeholders (within a country)
- 5 Trustworthiness of data sources is an issue. Standards?



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## Main outcomes of Key discussion topic 2:

- 1 Transboundary scale is very important. Also exchange forecasting and other products to improve services. Political action plan is needed to complement resolutions/regulations.
- 2 Knowing water food security is a major challenge, water footprint can be a frame for exchanging data. (There is a link to net water positive operation of private sector – secretariat)
- 3 Identifying specific topics (objectives) can help data sharing, as many governments are not ready to allow sharing data with global centers. Thematic data collection (example: Arctic Hycos) is important to show value of cooperation.
- 4 Publish regular report on data exchange to motivate stakeholders?
- 5 Cooperation between on site and satellite observations is important , Lake and Reservoir data center as an example.



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## Main outcomes of Key discussion topic 3:

- 1 hourly data useful for flood forecast
- 2 Discriminate real and historical data; countries more ready to share e.g. yearly data
- 3 Define a set of priority stations and then agree on which data need to be exchanged and what metadata needs to be registered
- 4 There are existing platforms for exchanging data
- 5 quality assured as well as real or near real time data needs to be exchanged



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## Main outcomes and conclusion of the workshop:

- 1 Global willingness to share data for flood and droughts and for climate models, but aware there are limitation and difficulties
- 2 All space and time scales are required, easier to share at transboundary scale, for historical data
- 3 WMO regulation can help and motivate countries.
- 4 National and Institutional policies are main obstacles – only a political action plan can resolve this
- 5 sharing forecasts is a key to motivate cooperation
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