WIS 2.0 strategy
How to meet WMO members needs in responding to technical and societal changes

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WMO Information System

• Network infrastructure, process and procedure to discover, access and exchange data

• WIS intended to support all WMO Programmes
  – Reality is that only World Weather Watch is well represented

• WIS is a network for expert (centres from WWW)
  – Difficult to put new data on WIS
  – Difficult to find data
  – Difficult to know that WIS exist

• In its current form, the WIS, and mainly the GTS, is a niche infrastructure that supports the expert meteorological community
Trends

• Constant increase in the flow of data to exchange and information to be disseminated to our various users mean that it is necessary to re-think how data is process, managed and shared
  – Data volumes created by earth observing and numerical prediction systems continue to grow considerably faster than the performance of telecommunications networks
  – Other sources of information are becoming available that may have data volumes that exceed those of traditional data sources, such as indirect information and crowd sourcing

• Users expect to access weather, water and climate information and services through the same mechanisms that they use for other types of information, using familiar interfaces and applications

• Users wish to combine mobile, cloud and social technologies to access a wider range of information sources and to collaborate in new and different ways
Trends

• Common data sharing platforms and technology are a prerequisite
  – Risk reduction and emergency response requires collaboration with multiple agencies
  – Assessing the impact of environmental hazards requires meteorological data to be combined with other socio-economic data

• Changes in data supply patterns and user expectations present new challenges that the current WIS struggles to meet
  – FTP protocol is no longer an appropriate method of delivering information on time

• At the same time, changes in technology present new opportunities
Opportunities

• Increasing use of the Web as a data sharing platform
• Commercial infrastructure providers offer
  – stable, secure and cost-effective ‘cloud’ hosting of virtualized computing resources
• Search engines (Google, Bing, Yahoo etc.) remain the common entry point for discovery of information
• Application Programming Interfaces (APIs) and Web Services are now very common solutions for process and exchange of data
• Messaging services and protocols offer new opportunities for sharing meteorological data in real-time based on common industry practices
• Applications such as Dropbox indicate that file distribution services have become commoditized and are no longer the domain of specialized applications such as GTS message switching
WIS 2.0

• Information System operated by Members built on commercially available services and industry standards
  – To exchange at the right moment the relevant information and avoid moving unnecessary large volumes of data between centres
  – To broaden the range of information available and improve data producers and data consumers experience
  – To simplify access to the information and make its use easier in order to develop new products, applications and services
  – Providing applications/services infrastructure alongside the data, and a catalogue of information and services
  – Avoiding duplication through use of shared components built on infrastructure
  – Allowing to use infrastructure and services to build services that meet the needs of domestic stakeholders

• A virtual one stop shop of weather, water and climate information
WIS 2.0

- All WIS data will be
  - Managed
  - Documented & Discoverable
  - Accessible and Easy to use
    - API to improve selection and granularity of requested data sets
    - Services to visualize or process the data and only ingest the required information
WIS 2.0 - the platform

- A global information management, processing and sharing platform

Change in user behaviour from downloading a copy of information for local processing to using services that process the information at its source.
WIS 2.0 - The ecosystem!

Opened to new partners from different business (energie, health, value-added service provider..) to develop the use of WMO information.
WIS 2.0 - Data Lifecycle Management

WIS 2.0 platform will be complemented by a set of principles to encourage best-practice in data life cycle management) by the WMO community.
Thank you
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