



# Task Team on Data Operations and Management

First Meeting of WMO RA-VI Working Group on Climate and Hydrology

Warsaw, Poland, 23 September 2014

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# Goals - Working Group ToRs

- f) To coordinate with Members and relevant partners the climate and hydrology data rescue activities in the Region and the establishment of high-quality data management standards including the implementation of modern Climate Data Management Systems (CDMS);
- g) To support the regional implementation of hydrological data operations and management including the development of data collection networks;

*No special comments from RAVI Management Group meeting  
(May 2015)*

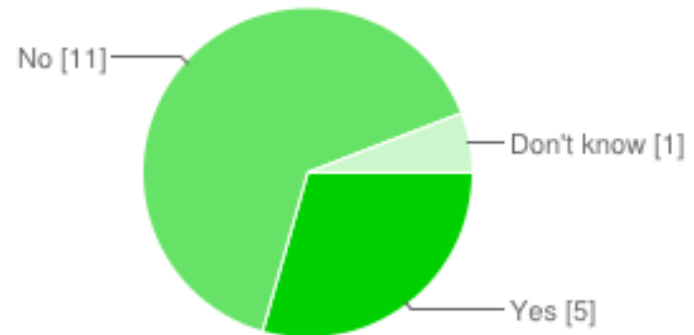
# TT Activities – Hydrological Perspective

Activity/Deliverable	2014/2	2015/1	2015/2	2016/1	2016/2	2017/1	Responsible	Priority	Status
Maintaining and improving the existing RA VI/CCI WebSite on Data Rescue, including information on available digitized data, data rescue projects, homogeneity methods, methodologies of data rescue, considering inclusion of info on hydrological data							Jose Antonio Guijarro & Harry Dixon		
Network design and optimization (with support from the Hydro Forum)							Jose Antonio Guijarro & Harry Dixon		
Support to standards development							Jose Antonio Guijarro & Harry Dixon		
Maintenance of monitoring systems							Jose Antonio Guijarro & Harry Dixon		
Harmonization of methodologies, quality control and access to data							Jose Antonio Guijarro & Harry Dixon		
Data exchange and sharing							Jose Antonio Guijarro & Harry Dixon		

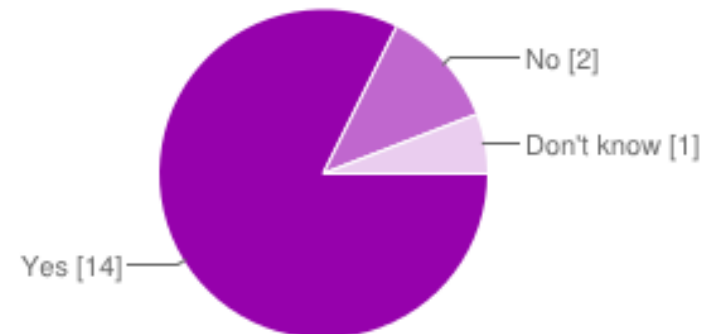
# TT Activity – Data Management and Standards

- Builds on 2008-2011 WG-Hydrology activities by Zsuzsanna Buzás.
- 2012 RA-VI Hydrology Forum priority. Survey of Forum Members needs completed:
  - NHSs using similar data processing methods and facing similar challenges
  - Few national standards exist. WMO guidelines are helpful but full standards would be useful.
- UK Standard currently in revision. Proposed CEN Work Item to develop European Standard.
  - ISO/WMO agreement.
- Link with CHy tasks in QMF and Data Management and Operations areas.
- *Possible activity to review current standards and support development of CEN standard.*

## National Standards in RAVI



## Would an international standard on hydrometric data management be beneficial to your organization?



# TT Activity – Data Management and Knowledge Exchange

- Hydrology Forum provides a good way of exchanging knowledge but need to improve regular exchange of knowledge.
- Survey of Forum Members:
  - Few formal training programme exist for hydrological data management.
  - Most training is informal, 'on the job', internal to each NHS.
  - Problems: lack of qualified staff, transfer of knowledge when staff change, etc..
- Can RAVI help develop knowledge exchange routes for sharing skills/best practice in the region?
- *Possible activities:*
  - *Online WMO e-forum*
  - *WMO training workshops*
  - *Personnel exchange*

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# TT Activities - Other

## **Network Design and Optimisation**

- 2012-14 Hydrology Forum Task – *Case Studies on Network Design.*

## **Data Exchange and Sharing**

- 2012-14 Hydrology Forum Task – *Improved data sharing procedures between NHSs and data centres.*
- Other relevant RA-VI activity: Data Exchange Policy for Sava River Basin (2014)
- RA-VI activities in this area should be strongly linked with CHy activities in Data Operations and Management area (especially WaterML testing / pilots).

## **Maintenance of Monitoring Systems**

- 2012-14 Hydrology Forum Task – *Review of Operational Maintenance and Safety Procedures.*
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- Further deliverable in these areas depend on the progress/outcomes of the Hydrology Forum.

# TT Activities – Hydrological Priorities

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Maintenance of monitoring systems							Jose Antonio Guijarro & Harry Dixon	<b>C</b>	
Harmonization of methodologies, quality control and access to data							Jose Antonio Guijarro & Harry Dixon	<b>A</b>	
Data exchange and sharing							Jose Antonio Guijarro & Harry Dixon	<b>B</b>	



# Possible TT Members - Hydrology

- Regional **Hydrology Forum Members** are key resource for delivering these WG tasks.
- **Nominations for WG:**
  - Czech Republic: Jan Danhelka
  - Spain: Maria Conception Garcia Gomez
- **OPACHE:**
  - Romania: Ionel Ghinescu
  - Germany: Ulrich Looser
  - Germany: Michael Natschke
  - Bulgaria: Plamen Lliev Ninov
  - Italy: Silvano Pecora



Photo – Nick Everard, Environment Agency

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