



World Meteorological Organization
Working together in weather, climate and water

RA V Workshop on WIGOS

WIGOS Framework Implementation Plan

Jakarta, Indonesia, 8-9 Sep.2012

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WIGOS Development & Implementation

Cg-XVI (May-June 2011):

- Decided to implement WIGOS - Res.50 (Cg-XVI),
- **Requests the regional associations:**
 - (1) To develop their **regional WIGOS implementation plans**;
 - (2) To **coordinate WIGOS implementation activities with the WIS** in their operating plans and work programmes;
 - (3) To **promote capacity-building and outreach activities** to assist Members in the implementation of WIGOS;
- **Requested TCs to:**
 - **Guide technical aspects** of WIGOS implementation
 - Incorporate WIGOS in their operating plans
 - Provide **technical guidance and advice to Members and RAs**
 - Develop **guidance for the design and evolution** of WIGOS
 - Develop **standards** to support WIGOS
 - Update WMO **Regulatory Material**, (TR, WIGOS Manual,..)
 - Requested EC-LXIII to establish ICG-WIGOS

WIGOS Development & Implementation

➤ ICG-WIGOS:

- 1st session (Sep.2011): recommendations and guidance on key WIGOS implementation activities
- TT-WIP (Mar.2012) -draft WIP, TT-WRM (Nov.2012), TT-WMD
Members own and manage their national observing systems

➤ ICG-WIGOS Strategy:

- **RAs “own” and manage their regional observing networks**
 - They develop **regional requirements**
 - They provide **input into global requirements**
 - They **identify issues and set priorities** for their regional networks
 - **They coordinate and manage the implementation within their regions**
- **TCs assist RAs**, solve technical problems, provide **advice**, and **assist** with implementation.
- Very important for each **RA to have its RIP well underway by the end of the year** & the key top level **oversight & working mechanism** in place.

WIGOS Development & Implementation

- **OPAG-IOS/ICT-IOS (June 2012)**
 - Oversee the development of **EGOS-IP** (ET-EGOS), one of the two basic WIGOS implementation plans
- **EC-64:**
 - **Adopted WIP** (Res.10) and requested:
 - Members, **RAs** and TCs to organize their activities as to **realize WIP**
 - CBS & CIMO to provide **technical lead** in WIGOS implementation
 - ICG-WIGOS to **keep WIP under regular review**, monitor the progress, update WIP and report to Cg-17
 - Members to continue providing **resources** (TF, JPO, SE)

WIGOS Basic Questions

➤ **What is WIGOS:**

- Improved existing WMO observing systems interfaced with co-sponsored and non-WMO OSs; Functionalities to be improved are addressed in WIP.

➤ **Relation among WIGOS Framework IP (WIP), Regional IPs (R-WIP) and National IPs (N-WIP):**

- WIP = Plan for the development of practices & procedures to be documented in WMO Regulatory Material
- R-WIP = Plan responding to WIP and Regional priorities
- N-WIP = Plan to implement improved functionalities based on practices described in the WMO Regulatory Material

➤ **Who are agents for implementation:**

- WIP = TCs (in collaboration with RAs and Members)
- R-WIP = RAs (in collaboration with TCs and Members)
- N-WIP = Members (in collaboration with RAs and TCs)

Agenda Item 4, Doc.4.2(2), ADD. 1

WIGOS Framework Implementation Plan v.1.0

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Key Activity Areas for WIGOS Implementation

1. **Management** of WIGOS implementation
2. **Collaboration** with WMO and co-sponsored observing systems
3. **Design, planning and optimized evolution** of WIGOS component OSs
4. Integrated OS **operation and maintenance**
5. Integrated **quality management**
6. **Standardization, system interoperability** and data compatibility
7. WIGOS **information resource**
8. **Data** discovery, delivery and archival
9. **Capacity** development
10. Communication and **outreach**

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Key Activity Areas for WIGOS Implementation

1. Management of WIGOS implementation

Develop, revise and update WMO Regulatory Material (TR, Manual)	Cg-17 (2015)	ICG-WIGOS
Incorporate WIGOS into structures and procedures of TCs and RAs	2012-2014	TCs RAs ICG-WIGOS
Provide annual reports and recommendations to EC & Cg	EC-65 EC-66 Cg-17	ICG-WIGOS
Develop Regional WIGOS Plans	2012-2013	RAs

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Key Activity Areas for WIGOS Implementation

2. Collaboration with WMO and co-sponsored OSs

Develop guidance, mechanisms and procedures for engagement coordination and collaboration with partner organizations	2014	ICG-WIGOS Partners
Develop the Architecture for Climate Monitoring from Space (ACMS) focusing on GFCS four priorities	2013-2015	CGMS CEOS CBS
Examine and recommend areas where closer regional cooperation and coordination would be beneficial	2013-2015	RAs
Establish closer collaboration at the national level , within NMHS, with other government agencies, and with potential external data providers	2012-2014	Members RAs

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Key Activity Areas for WIGOS Implementation

3. Design, planning and optimized evolution of W-COSs

Complete RRR practices, procedures, responsibilities and mechanisms for all systems and agreed app. areas	2013-2014	CBS Other TCs
Using the RRR process, develop procedures for and carry out a design for WIGOS at the global scale	2012-2015	ET-EGOS ICG-WIGOS, TCs
Evolve and implement OSs in the Region following the technical guidance of TCs as represented in the EGOS-IP and other observation system implementation plans	2013-2015	RAs
Validate current global RRR against regional user requirements and update WMO database	2014-2015	ET-EGOS ICG-WIGOS, TCs
Contribute to the collective regional effort to evolve and implement observing systems following the EGOS-IP and other observation system implementation plans	2013-2015	Members
Update the global RRR database to take into account sub-regional and national user requirements	2014-2015	Members

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Key Activity Areas for WIGOS Implementation

4. Integrated OS operation and maintenance

Develop guidance, mechanisms and procedures for improved integration of observational data and products	2015	ICG-WIGOS
Develop guidance for the process of sharing, between component observing systems, operational experiences, of expertise and for resourcing joint activities	2013	ICG-WIGOS

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Key Activity Areas for WIGOS Implementation

5. Integrated quality management

Develop WIGOS Quality Management guidance, mechanism, practices and procedures to include monitoring	2014	ICG-WIGOS TCs
Examination of current quality management practices being used by WMO observing programmes.	2013	ICG-WIGOS

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Key Activity Areas for WIGOS Implementation

6. Standardization, system interoperability and data compatibility

Develop guidance for WIGOS standards and document the implemented standards , including best practices, procedures on instruments, methods of observations, data products, etc.	2013	TCs WIGOS PO
Develop and maintain the Standardization, Operational and RRR databases .	Cg-17	ICG-WIGOS

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Key Activity Areas for WIGOS Implementation

7. WIGOS information resource

Design and develop the WIGOS Information Resource	2013-2015	Secretariat (Members)
Investigate the need for a database describing the Global Observations Products (Satellite Data, Weather Radar)	2012	ICG-WIGOS TCs
Survey WMO Members on what they could offer to support development and operations of WIGOS Information Resource	2012	WIGOS PO
Collect, maintain and provide the metadata required by WIGOS support tools	Cg-17	Members

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Key Activity Areas for WIGOS Implementation

8. Data discovery, delivery and archival

Develop WIGOS metadata standards and guidance practices for maintenance of and access to WIGOS metadata	2013-2015	TCs ICG-WIGOS Members
To initiate and develop a mechanism and outreach strategy for the integration of more relevant observation data and associated interpretation metadata.	2012-2013	ICG-WIGOS
Outreach activities targeting more observational data available through WIS	2014-2015	Members (support from WIGOS PO)

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Key Activity Areas for WIGOS Implementation

9. Capacity development

Develop a WIGOS Capacity Development strategy including education and training	2013-2015	ICG-WIGOS ETR, RAs
Assistance to WMO Members regarding WIGOS integration	2012-2015	WMO Secretariat
Develop WIGOS related guidelines and training materials and other relevant documentation	2013	WIGOS-PO
Resource mobilization	2012-2015	Members (WMO Secretariat)
Tools from the WIGOS Information Resource to be used nationally for the design and management of national WIGOS networks	2014	Members

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Key Activity Areas for WIGOS Implementation

10. Communication and outreach

Develop an effective communication, outreach, capacity development, and education strategy	2012	ICG-WIGOS
Develop communication and outreach materials (see Annex 1 of WIP for suggestions) and make them available via the WIGOS Portal	2012-2013	WIGOS-PO