

CIMO/WIGOS EXPLORATORY WORKSHOP

**Improved Surface-based Data Quality Through Improved
Standardization of Practices and Procedures**

Session1: Weather Requirements

Langen, Germany, 3-5 December 2014

WIGOS: A future observing framework for WMO



WIGOS Framework: Key activity areas

Management of WIGOS Implementation

Collaboration with co-sponsors and partners

To oversee, guide and coordinate WIGOS

Data discovery, delivery & archival

To ensure supply of and access to WIGOS observations

Observing system operation & maintenance



To plan, implement and evolve WIGOS component systems

Design, planning and optimised evolution

Capacity Development

To facilitate and support the operation of WIGOS

Communications and outreach

Operational Information Resource

Standards, interoperability & compatibility

Quality Management



WIGOS Framework Implementation Plan (WIP)

CONTENTS

1. Introduction and Background
2. **Key Activity Areas for WIGOS Implementation**
3. Project Management
4. Implementation
5. Resources
6. Risk Assessment / Management
7. Outlook

Annexes

KEY ACTIVITY AREAS

- 1) Management of WIGOS implementation
- 2) Collaboration with WMO co-sponsored observing systems & international partners
- 3) Design, planning and optimized evolution
- 4) Observing System operation and maintenance
- 5) Quality Management
- 6) Standardization, system interoperability and data compatibility
- 7) The WIGOS Operational Information Resource
- 8) Data and metadata management, delivery and archival
- 9) Capacity development
- 10) Communications and outreach



WIGOS Information Resource (WIR)

www.wmo.int/wigos/wir

- Goal: Provide single access point for WIGOS stakeholders (*Network decision makers, Implementation Coordinators, Data users etc.*)
- Shall contain all relevant information on the status and evolution of WIGOS and its components
- Formally launched at EC-65 (May 2013)
- To be fully operational from 2015



WMO Application Areas

1. Global Numerical Weather Prediction
2. High Resolution Numerical Weather Prediction
3. Nowcasting and Very Short Range Forecasting
4. Seasonal to Inter-annual Forecasts
5. Aeronautical Meteorology
6. Atmospheric Chemistry
7. Ocean Applications
8. Agricultural Meteorology
9. Hydrology
10. Climate Monitoring (GCOS)
11. Climate Applications (Other aspects, addressed by the Commission for Climatology)
12. Plus GFCS, GCW requirements to be considered



WMO Application Area	Contributing Ground-based Observation System
Global NWP	Weather Radar, Windprofiler
High Resolution NWP	Weather Radar, Windprofiler, Lidar, Radiometer
Nowcasting/VSRF	Weather Radar, Windprofiler, Lidar, Lightning Detection Methods
Aeronautical Meteorology	Ceilometer, Visibilitymeters, Weather Radar, Lidar, Cloud Radar, Lightning Detection Methods
Atmospheric Chemistry	Lidar, Ceilometer, Spectrometer, Gas Chromatograph
Ocean Applications	Costal HF Radar
Agricultural Meteorology	Weather Radar, Visibilitymeters, Ceilometers
Hydrology	Weather Radar

