# Report of Chair, Brian Howe (CIMO Representative)

Background:

**WIGOS Purpose and Scope:**

The WMO Integrated Global Observing System (WIGOS) provides a **new framework for WMO observing systems** and the contributions of WMO to co-sponsored observing systems. It is important to recognize that WIGOS is not replacing the existing observing systems, but is rather an **over-arching framework** for the evolution of these systems which will continue to be owned and operated by a diverse array of organizations and programmes.

**Key Activity Areas for WIGOS Implementation:**

**To migrate** the existing observing systems (the Global Observing System (GOS), the Global Atmosphere Watch (GAW), the WMO Hydrological Cycle Observing System (WHYCOS) and the Global Cryosphere Watch (GCW), including surface-based and space-based components and all WMO contributions to GFCS, GCOS, GOOS, GTOS and GEOSS) into a more **integrated single system** that is WIGOS[[1]](#footnote-1), focused effort is required in the following key areas, detailed in the sub-chapters to follow:

Management of WIGOS implementation; Collaboration with WMO and co-sponsored observing systems; Design, planning and optimized evolution; Integrated Observing System operation and maintenance; Integrated Quality Management; Standardization, system interoperability and data compatibility; The WIGOS Operational Information Resource; **Data and metadata management,** delivery and archival; Capacity development; Communication and outreach.

# TT-WMD - Terms of Reference:

In accordance with guidance and recommendations of Cg-XVI, EC and ICG-WIGOS-1:

1. To identify the information that is needed to allow the majority of users to use WIGOS observations in appropriate contexts and in a defensible way
2. To create the WIGOS Core Metadata Standard that allows the essential information to be exchanged unambiguously, regardless of the format used for the transfer
3. To define the mechanism for maintaining the WIGOS Core Metadata Standard, including how metadata might be provided that is additional to the Core.
4. To implement within the WIGOS Core Metadata Standard, and the WMO Core Metadata Profile, a standard method of providing users with an indication of the quality of the data, and to do so in a way that distinguishes with the quality management of the data (“quality of the observation”) and ensuring that the user is able to identify which applications the data are suitable for (“classification” of the observation”).
5. To complete its tasks and hand over additional requirements to its successor (if required) by **31 December 2012**.

## Guiding Principles for WIGOS Metadata

Without some guiding principles, the task of defining, sharing and using WIGOS metadata would become impossibly large.

1. **WIGOS metadata should be prepared with the needs of the user in mind**; data producers need to record a lot of information about observations, but the way it is recorded may be unhelpful for other users without continual focus on the needs of the user.
2. **WIGOS should focus on creating Core metadata that is needed by the majority of users**; that Core might expand in time, and individual centres and Programs may extend the WIGOS metadata they exchange beyond the Core, but users should expect that the Core contents will be available for WIGOS observations, and that the contents of the Core will be stable over time.
3. **WIGOS Core metadata will provide sufficient information for the majority of users to make appropriate use of the observations** and to allow the observations to be used in an appropriate and defensible way for high-impact studies or legal processes.

# Developing the WIGOS Core Metadata Standard

Defining the WIGOS **Core Metadata Standard** is **urgent and high** priority. It requires focused effort, and the standard needs to be in place for WIGOS to be considered a success.

A fixed-term Task Team will be set up to develop the initial WIGOS Core Metadata Standard, and to define the mechanisms for maintaining the standard over time. Although it is probable that there will be a permanent requirement for a team to manage the evolution of the WIGOS Metadata Standard, perhaps taking it beyond the Core, the mechanisms for doing so would be proposed by the Task Team.

The Task Team was created in early 2012, delayed implementation due logistical challenges.

Key deliverable from this session will be the development of a work plan and assignment of tasks to team members.

1. The WIGOS Functional Architecture document provides a description of the integrated single system that is WIGOS and which represents the goal of this Implementation Plan. That document is in early draft form at the time of this version of WIGOS-IP (version 1). [↑](#footnote-ref-1)