



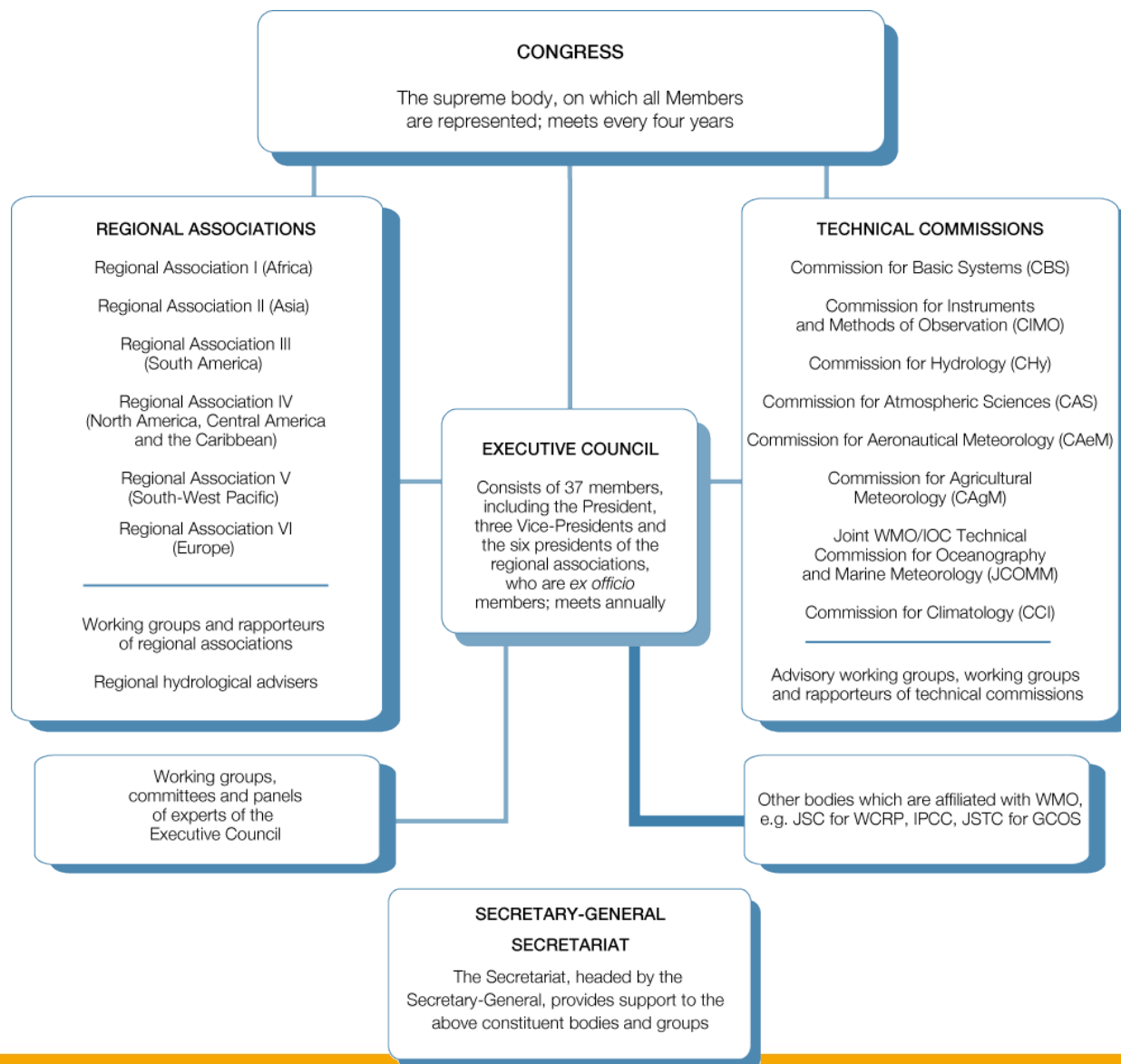
World Meteorological Organization

Weather • Climate • Water

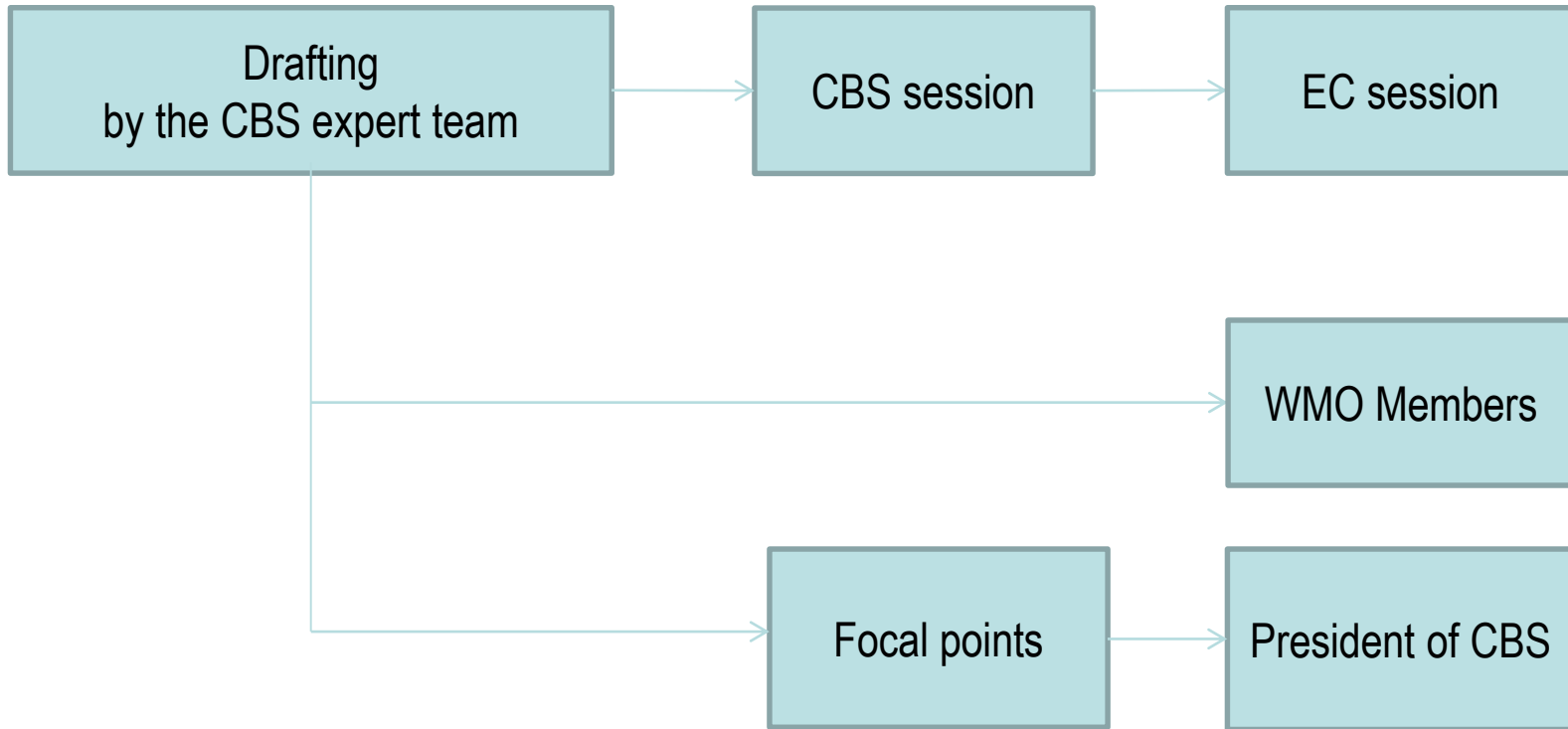
Management of GRIB by WMO

Closing the GRIB/NetCDF gap Workshop
ECMWF, 24-25 September 2014

Structure of WMO



Authorization process of amending GRIB



Publication of GRIB tables

GRIB edition 1 and 2:

available in the Manual on Codes
(WMO-No. 306), Volume I.2

Complete version in .pdf (official)
Tables in .txt and .xml

Ref: [http://www.wmo.int/pages/prog/www/
WMOCodes.html#Codes](http://www.wmo.int/pages/prog/www/WMOCodes.html#Codes)



Initiative for the new edition

IPET-DRMM

CBS Inter-Programme Expert Team on Data Representation Maintenance and Monitoring

TT-GRIB

Task Team on GRIB

- Identify issues that cannot be addressed by the current editions of GRIB and develop the requirements for the next edition of GRIB.
- Develop the next edition of GRIB to include the definition of the GRIB format for representation, design and content of GRIB tables, the “grammar” and “syntax” used when representing data in GRIB, and defining tests that validate the correct operation of tools to support the new GRIB edition - in a way that is compatible with the WMO Logical Data Model.



Data model – interoperability for observations

IPET-MDRD

CBS Inter-Programme Expert Team on Metadata and Data Representation Development

TT-AvXML

Task Team on Aviation XML

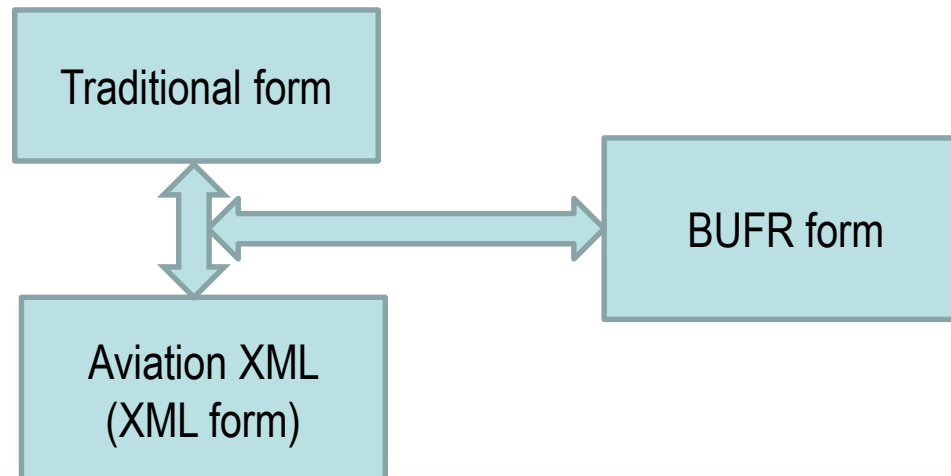
Logical data models:

METCE (meteorological information)

SAF (Simple Aeronautical Features)

IWXXM (apply ICAO reporting rules)

Data model → interoperability for observations and airfield forecasts



METCE data model

METCE - Modèle pour l'Échange des informations sur le Temps, le Climat et l'Eau

a set of foundation building blocks to support application schema in the domains of interest to WMO, notably the weather, climate, hydrology, oceanography and space weather disciplines

For more information, see

<http://www.wmo.int/pages/prog/www/WIS/wiswiki/tiki-index.php?page=AvXML-1.0-Packages>



Code registry – WMO initiative with UK Met office

<http://codes.wmo.int/>

The WMO Codes Registry is the mechanism through which the authoritative *terms* required for [WMO](#) [AvXML](#) are published as web-accessible resources.

Terms include

- vocabularies
- code tables
- definitions



Summary

- WMO has structures to govern
 - Minor revisions of the Table-Driven Code Forms (TDCF), such as GRIB, on a regular basis (every half year or annually), in addition to major revisions (new editions).
- Model driven approach
 - Simplifies conversion between data representations
- Publication
 - Moving to machine readable vocabularies

