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World Meteorological Organization
Organisation météorologique mondiale

OSCAR/Surface and WSI-Part 1

Demonstration of WSI Allocation for Hydrology Stations, OSCAR/Surface Support Materials

29-30 January 2024, Zagreb

Recap: Allocation of WIGOS Station Identifiers

- Unique Identifier of a station in the WIGOS context.
- OSCAR/Surface as the official catalogue of WSI.
- Allocation of more than one possible but not recommended.
- Format: 4 blocks with numbers and characters.
- **WSI for Hydrology** (10.5 WMO HYDROLOGICAL OBSERVING SYSTEM in WMO-No. 1165)
- Four scenarios proposed for hydrology

Block (content type)	1 st block (number)	2 nd block (number)	3 rd block (number)	4 th block (character)
Description/Name	WIGOS Identifier Series	Issuer of Identifier	Issue number	Local Identifier
Features	Allows future expansion	Allows to distinguish between identifiers issued by different organizations	Allows sub-delegation	Allocated to station
Range	0	0...65534	0...65534	16 characters
Example 1	0	20000	0	06700
Example 2	0	124	0	73033

Free* assignment by the country, allows sub-delegation based on i.e. organisation, network, ...

Preassigned, 0 for stations

Free assignment by the country

* based on national WIGOS Implementation Plan

ISO Country number, if assigned by the country.

Program-related, if assigned by the WMO secretariat or Program Focal Point.

WIGOS Station Identifiers Scenario A1 and A2

Scenario	WIGOS ID Series	Issuer of ID Country ISO Code	Issue number (see <u>WMO No. 1165 WIGOS Guide, section 2.3.2</u>)	Local ID
A1	0	1-999	0	To be defined by Member
A2	0	1-999	1-99 (National organizations)	To be defined by organization

Hydrological stations registered through the National Focal Point (NFP) on WIGOS, the issuer of identifier is identified by its ISO 3166 (3 digits) Country Code.

WIGOS Station Identifiers Scenario A

<u>WIGOS ID Series</u>	<u>Issuer of Identifier</u> Canada ISO Code	<u>Issue number</u>	<u>Local Identifier</u> Hydrometric Station Number Index (Yukon river at Dawson)	<u>WIGOS Identifier Series</u>	<u>Issuer of Identifiers</u> Country ISO Code	<u>Issue number</u> National organizations	<u>Local Identifier</u>
0	124	0	09EB001 ¹	0	(Brazil) 076	(NMET) 100 (DECEA) 101 (DHN) 102 (ANA) 103 (...)	GGGGGGGTTNNNN ²
					(Côte d'Ivoire) 384	(NMS stations) 1-199 (NMS Partners' stations) 200-299 (...) 9000-9999	³ To be defined by organization
					(Italy) 380	1-2-3-(...)	1-2-3-(...)

A1: Canada as an example of the issuer of identifier and the local identifier being the Hydrometric Station Number Index for the Yukon river at Dawson, used by Water Survey of Canada.

A2: Brazil, Côte d'Ivoire and Italy proposed their own WSI national schemas following this procedure, but in three different ways, which are shown above as illustrative examples.

WIGOS Station Identifiers Scenario A

Scenario	WIGOS ID	Issuer of ID WMO Hydrology Observing System (WHOS)	Issue number	Local ID
B1	0	21016	0	AC _i BB _i H _i H _i H (International Hydrological Code)
				To be defined by: - WHOS or - Organization
B2	0	21016	AC _i BB (Basin indicator)	To be defined by: - WHOS or - Organization

- WSI via a delegated authority from the observing component of the WHOS in case of non-Met Service observing stations, i.e. Research Organizations, Basin Authorities/ Organizations, etc
- Provides a worldwide unique issuer of identifier that identifies the station as a provider of hydrological data.
- The allocation of WSIs is done WMO Secretariat.

WIGOS Station Identifiers Scenario B1 and B2

<u>WIGOS Identifier Series</u>	<u>Issuer of Identifier</u> WMO Hydrology Observing System (WHOS)	<u>Issue number</u>	<u>Local Identifier</u>
<u>0</u>	<u>21016</u>	<u>0</u>	<u>4203010</u>

<u>WIGOS Identifier Series</u>	<u>Issuer of Identifier</u> WMO Hydrology Observing System (WHOS)	<u>Issue number</u>	<u>Local Identifier</u>
<u>0</u>	<u>21016</u>	<u>4203</u> (Basin indicator)	<u>To be defined by:</u> <u>(i) WHOS or</u> <u>(ii) Organization</u>

- Procedure B1: The local identifier can be assigned using the International Hydrological Code (IHC) or organizations local ID
- The IHC (from Manual on Codes, No.306, see section F of each regional Chapter) allows identification of the WMO Region (A), country (C_i), river basin or group of basins (BB) and the station (i_Hi_Hi_H).
- The lists of C_i and BB are published in Volume II of the Manual on Codes (WMO–No. 306), while the i_Hi_Hi_H value has to be set in a unique way at national level.
- The same example in A1: WHOS (21016), the local identifier refers to the WMO Region (4), country (2), river basin (03) and station (010 given randomly).

B2: In this case, a part of the IHC was allocated to the issue number. The region (A), country (C_i) and basin (BB) identifiers are used: it would enable the issuer of an identifier to categorize stations, allow basin organizations to issue WSIs independently and limit duplicates.

Assignment

Type of station	Station	WIGOS ID	Issuer of ID	Issue number	Local ID
Inland (A1)					
Inland (A2)					
Inland (B1)					
Inland (B2)					
Transboundary (A1)					
Transboundary (A2)					
Transboundary (B1)					
Transboundary (B2)					

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