



IHO GI Registry Updates

to vessel measurement attributes

Raphael Malyankar

NIPWG VTC

December 2022



International Hydrographic Organization

IHO COMPLEX ATTRIBUTE "VESSELS MEASUREMENTS"

Domain	IHO Hydro		
Name	Vessels Measurements		
CamelCase	vesselsMeasurements		
Item Identifier	772 ?		
Definition	Values, discovered by measuring, that correspond to vessels characteristics.		
Data type	complex		
Sub Attributes	No.	Attribute name	
	1	<u>Comparison Operator</u>	
	2	<u>Vessels Characteristics</u>	
	3	<u>Vessels Characteristics Value</u>	
	4	<u>Vessels Characteristics Unit</u>	
Reference	https://www.merriam-webster.com/dictionary/measurement		
Reference Source	Merriam-Webster's Collegiate Dictionary		
Similarity to Source	Restyled : The specification includes information about its context that is not explicit in the specification in the external source.		
Remarks	VSLVAL has been set to REAL assuming 3 decimal places, i.e.: 10.000 m. That would give the result: 1. VSLMSM [VSLCAR=4 (draught); VSLVAL=10.5; VSLUNT=1 (m); COMPOP=2 (>=)] the regulation applies for vsl of 10.5 m draught and above. 2. VSLMSM [VSLCAR=9 (deadweight); VSLVAL=2000; VSLUNT=4 (ton); COMPOP=5 (=)] the regulation applies for vsl of exactly 2000 DWT. 3. VSLMSM [VSLCAR=1 (L.O.A.); VSLUNT=1 (m); COMPOP=3 (<)] the regulation applies for vsl of less than 150 m length. Using a further example: 4. [VSLMSM [VSLCAR=1 (L.O.A.); VSLVAL=50; VSLUNT=1 (m); COMPOP=1 (>)]], CATVSL=3 (tanker), LOGCON=1 (and), LIMTYP=2 (required); associated to a PILBOP object: tankers with LOA > 50.0 m must use the PILBOP. In an example for tankers between 50 and 100 m in length, the coding is like this: 5. [VSLMSM [VSLCAR=1 (L.O.A.); VSLVAL=50; VSLUNT=1 (m); COMPOP=3 (<)]], CATVSL=3 (tanker), LOGCON=1 (and), LIMTYP=2 (required).		



REVISIONS - 1



International Hydrographic Organization

(1) Revision to Remarks (see below)

Name	Vessels Measurements		
Alias			
CamelCase	vesselsMeasurements		
Definition	Values, discovered by measuring, that correspond to vessels characteristics.		
Reference	https://www.merriam-webster.com/dictionary/measurement		
Reference Source	Merriam-Webster's Collegiate Dictionary (<u>Detail view</u>)		
Similarity to Source	Restyled		
Remarks	Combines (i) specifications of vessels' measurable characteristics (length, beam, tonnages, etc.), (ii) limit values for the specified characteristics (with units), (iii) arithmetical comparison operators (greater than, etc.), and (iv) logical operators (AND/OR) to define a subset of vessels characterized by the specified ranges. For example, the combination (draught, 10.5, metres, greaterThan) describes "vessels with draught greater than 10.5 metres".		

(2) Also revise name and definition to align with actual use:

Name: Vessel Measurements Specification

Definition: Combinations of values of measurable characteristics or dimensions of vessels, used to specify size and tonnage ranges.



IHO ATTRIBUTE "VESSELS CHARACTERISTICS VALUE"

1921-2021

International Hydrographic Organization

AIIMDO	I VICCIIC CHARACTIRIC HOC VALUE		
Domain	IHO Hydro		
Name	Vessels Characteristics Value		
CamelCase	vesselsCharacteristicsValue		
Item Identifier	908 ?		
Definition	The value of a particular characteristic such as a dimension or tonnage of a vessel.		
Data type	real		
Additional Data	Input data following data type		
	Minimum Range 0		
	Maximum Range		
	Range Closure		
	Precision		
	Quantity otherQuantity Specification		
	Format		
	Definition		
	Symbol		
Reference	2017		
Reference Source	IHO Nautical Information Provision Working Group		
Similarity to Source	Identical : The style of the definition has been changed to match the style and structure of other specifications in the register that has imported the specification.		
Remarks	Examples: VSLVAL = 12.345 + VSLCAR = 4 (draught) = draught of 12.345 VSLUNT = 1 (m); VSLVAL = 12345 + VSLCAR = 11 (net tonnage) = net tonnage of 12345 VSLUNT = 7 (net ton (NT)); VSLVAL = 123.45 + VSLCAR = 1 (length overall) = length overall of 123.45 VSLUNT = 1 (m).		



IHO REVISION - 2



International Hydrographic Organization

Revision to Remarks (see below)

Name	Vessels Characteristics Value	
Alias		
CamelCase	vesselsCharacteristicsValue	
Definition	The value of a particular characteristic such as a dimension or tonnage of a vessel.	
Reference	2017	
Reference Source	IHO Nautical Information Provision Working Group (<u>Detail view</u>)	
Similarity to Source	Identical	
Remarks	Indicates range limits in expressions characterizing vessels by dimensions and tonnages. The unit of measure, characteristic, and comparison operator (greater, less, etc.) are encoded separately.	



CONCLUSION



International Hydrographic Organization

- NIPWG is invited to:
 - Endorse the revised Remarks for "vessels measurements" and "vessels characteristics values".
 - These are clarifications that do not affect semantics or data formats, and have been proposed to the IHO GI Registry Concept Register.
 - Additional revisions can be proposed later if desired.
 - Endorse the proposed new name and definition of "vessels measurements".
 - NIPWG endorsement of the revised name and definition is requested before they are proposed to the GI Registry.
- All proposed revisions will need to be approved by the DCB.
- Approval and subsequent data dictionary updates will be too late for S-131 Edition 1.0 but can be adopted in future editions.