

# INTERNATIONAL HYDROGRAPHIC ORGANIZATION

## Marine Spatial Data Infrastructures Working Group (MSDIWG)

### SDI/MSDI Related Standards

*Last update: 6 April 2020*

#### **Tier 1 Standards**

##### Visualization & Portrayal

OGC/ISO 19128 Web Map Service (WMS)

OGC Web Map Tile Service (WMTS) 1.0

OGC Styled Layer Descriptor 1.1 (SLD)

OGC Web Map Context 1.1 (WMC)

OGC KML 2.2

##### Catalogue & Discovery

ISO 19115, Geographic information – Metadata

OGC Catalogue Services Specification 2.0.2 (CSW)

ISO Metadata Application Profile

OGC (ISO19115 Metadata) Extension Package of CS-W ebRIM4 Profile 1.0

#### **Tier 2 Standards**

##### Distributed Maintenance & Use (Technology)

OGC/ISO 19136 Geography Markup Language (GML)

OGC/ISO 19142 Web Feature Service 2.0

OGC/ISO 19143 Filter Encoding 2.0

OGC Web Coverage Service (WCS) 2.0

##### Domain Model standards (Content)

OGC CityGML

ISO 19144, Geographic information -- Classification systems

ISO 19152, Geographic information -- Land Administration Domain Model (LADM)

GeoSciML – Geological structure and bore holes

OGC WaterML 2.0 - Sharing in-situ sensor water observations

S-57/S-100 - IHO Transfer Standard for Digital Hydrographic Data

#### **Tier 3 Standards**

##### Geospatial Processing

OGC Web Processing Service (WPS)

##### Mobile Devices

OGC Open GeoSMS

OGC GeoPackage

##### Real Time

OGC/ISO Observations & Measurements Schema (O&M) / ISO 19156

OGC Observations and Measurements XML (OMXML)

OGC Sensor Model Language (SensorML)

OGC Sensor Observations Service (SOS)

OGC Sensor Planning Service (SPS)

##### Geosemantics

ISO 19150 Geographic information – Ontology