Water quality IE update
The 125th OGC Member Meeting

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With the support of

Open Geospatial Consortium

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Context

- Water Quality workshop March 2022
- Kick-off : 13/09/2022
- Weekly webconf every Tuesday since then
- The reference point : [https://github.com/opengeospatial/WaterQualityIE/](https://github.com/opengeospatial/WaterQualityIE/)
  - Link to living G.Doc for minutes then GoToMeeting webconf link etc…,
  - Issues,
  - Model : until we move it to OGC Sparx Cloud.
Progress overview

• Partners expectations regarding the IE

• OMS crash courses

• Use cases identifications and phasing

• Object diagrams
  • From doodles to real ones

• Serializations examples

• Test implementations from the various partners: server, client

• Report
Building the team momentum

- Partners expectations regarding the IE -> various presentations
  - Other partners are expected -> La Plata basin (through WMO)

- OMS crash courses
  - Highly important to share a common language
## Use cases identifications and phasing

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<th>Method</th>
<th>Org</th>
<th>Quantity</th>
<th>Physical properties</th>
<th>Chemistry</th>
<th>Biology</th>
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<td>Samples</td>
<td>Observed Property group</td>
<td>Here as a support to WQ</td>
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<td>Sensors</td>
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<td>Remote Sensing</td>
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**FoI Type:** Water (Surface and Ground together at this stage)

**Rationale (per Use Case)**

A²/ Object diagrams + enrich semantic baseline

B²/ API identification

C²/ Proof of concept (server & client)

Iterate
Object diagrams

- Almost everything is in the standard baseline just need to agree on how to use it
Object diagrams

- So far under the WQ IE Github: https://github.com/opengeospatial/WaterQualityIE/tree/master/Model

- Activity to have it under OGC Sparx Cloud in coordination with OGC Conceptual Modelling SubGroup
Object diagrams

- In-situ surface water quality observation: 90% OMS + some additions
Object diagrams

- Lab surface water quality observation: 90% OMS + some additions
Next steps

- Refining our joint understanding on the needs
- Enriching object diagrams
- Need for « WQ specific information / modeling » ?
  - Depth attributes on Observer and/or Host ? -> subtyping Observer | Host ?
  - Concept of Water Quality station (an OMS SpatialSample)
  - Environmental Monitoring Activity ?
Next steps

- OMS serializations example
  - ? JSON only ?

+ « which API to serve what ? » discussion

⇒ Partners implementation
Thank you and thanks to
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The WaterQuality IE team
Thank You

Community
500+ International Members
110+ Member Meetings
60+ Alliance and Liaison partners
50+ Standards Working Groups
45+ Domain Working Groups
25+ Years of Not for Profit Work
10+ Regional and Country Forums

Innovation
120+ Innovation Initiatives
380+ Technical reports
Quarterly Tech Trends monitoring

Standards
65+ Adopted Standards
300+ products with 1000+ certified implementations
1,700,000+ Operational Data Sets
Using OGC Standards