



*WFD2016 Reporting Workshop
under the Common Implementation
Strategy of the Water Framework
Directive (WFD)*

-

*Reporting descriptive data at districts
level*

13/11/2015



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1. Reporting data schemas
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0. Overview

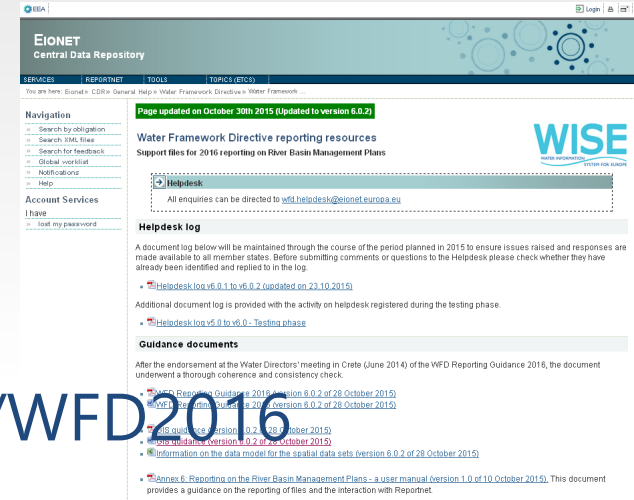
Resources & tools

- WFD Reporting Guidance
- UML Data Model
- Schema:

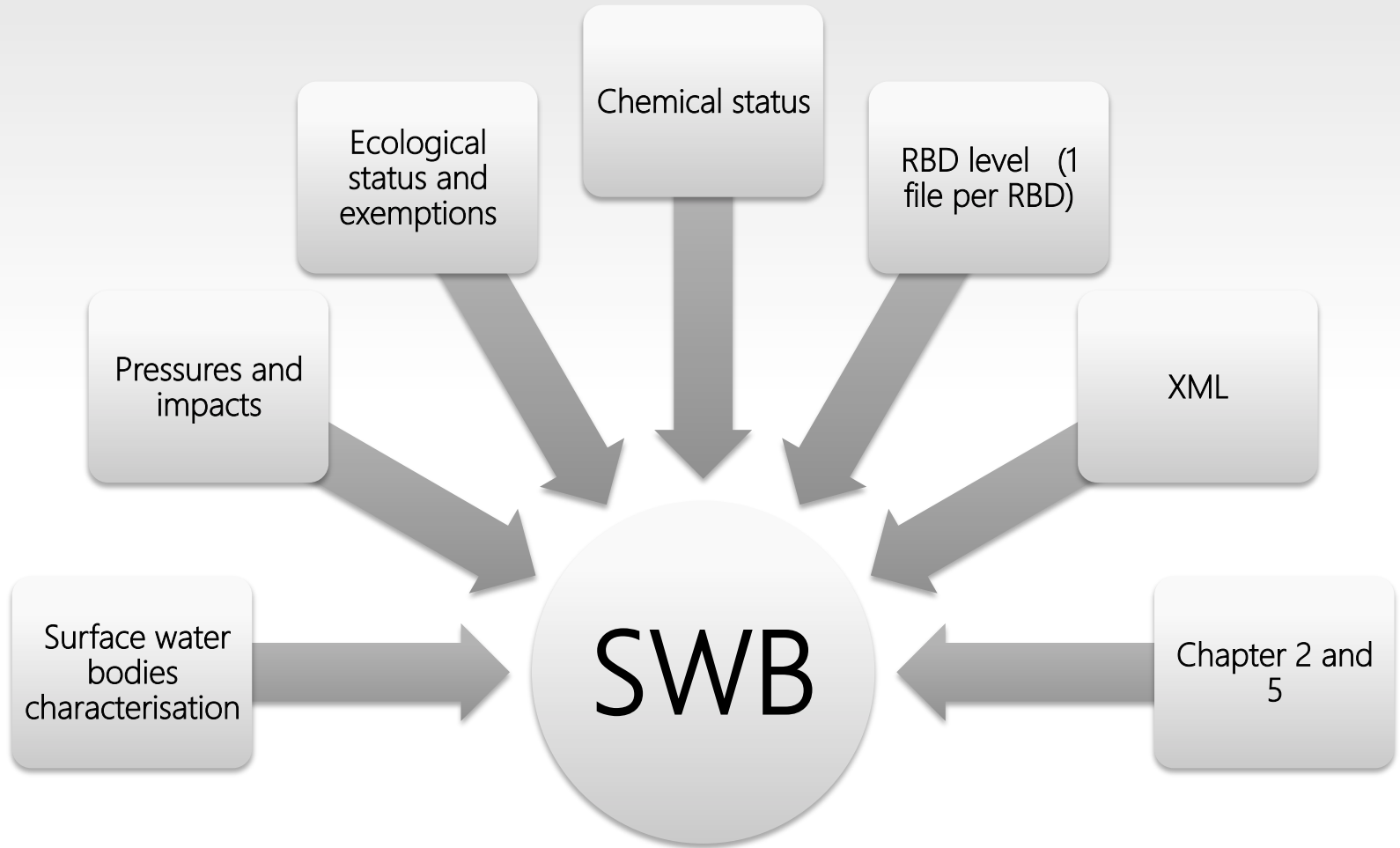
<http://dd.eionet.europa.eu/schemas/WFD2016>

- Access DB template
- Guide to report Access DB
- Conversion tool from Access to XML

http://cdr.eionet.europa.eu/help/WFD/WFD_521_2016



1. Reporting data schema: SWB UML



1. Reporting data schema: SWB UML

Surface water body

- Unique EU code
- SubUnit Code (if SU exists)
- Name
- Category (Enumeration)
- Natural, Artificial,...
- MS Code = SWMET, RBMP
- Transboundary: Yes, No,...
- Ecological status or potential value
- Chemical status



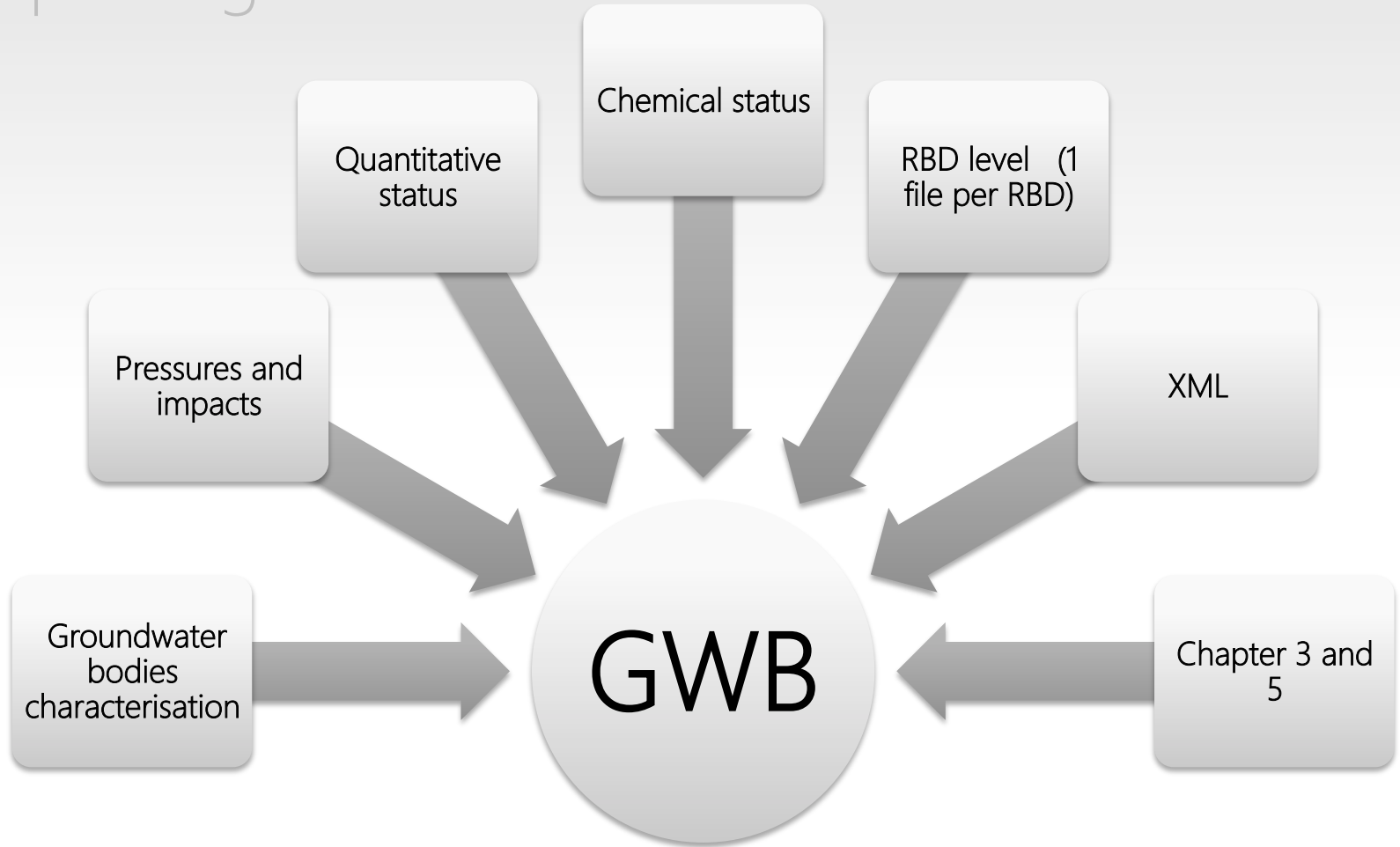
1. Reporting data schema: SWB UML

Child classes (6)

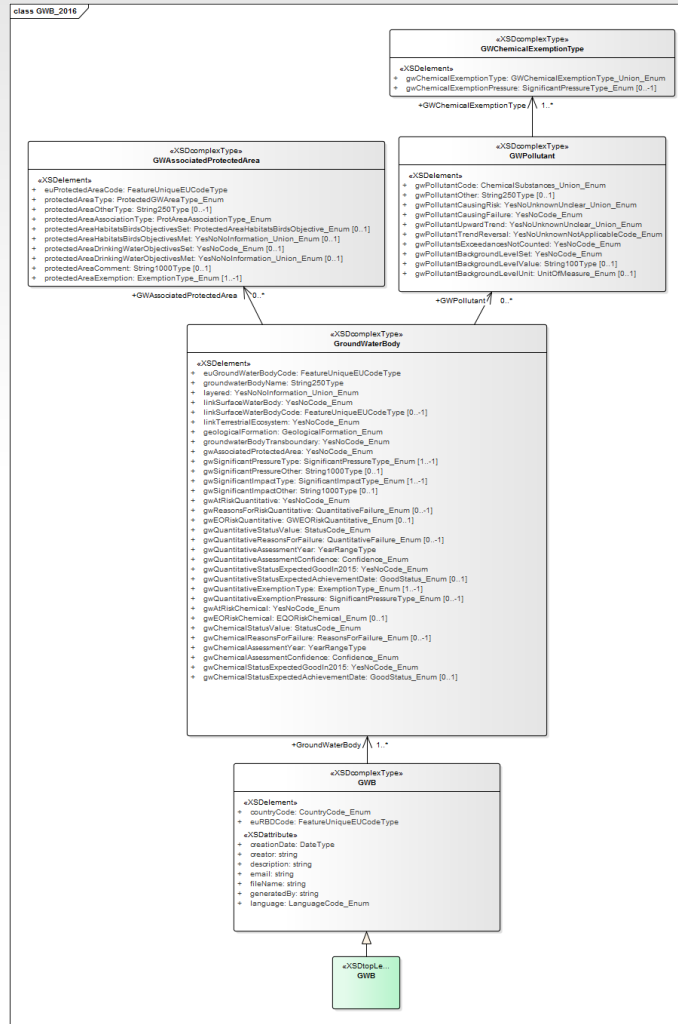
- Falling River Basin Specific Pollutants
- Ecological exemptions (not achieved in 2015)
- Quality elements
- Associated protected areas
- Priority Substances –Annex8d (failure, exceedance, improving)
- Chemical exemption types



1. Reporting data schema: GWB UML



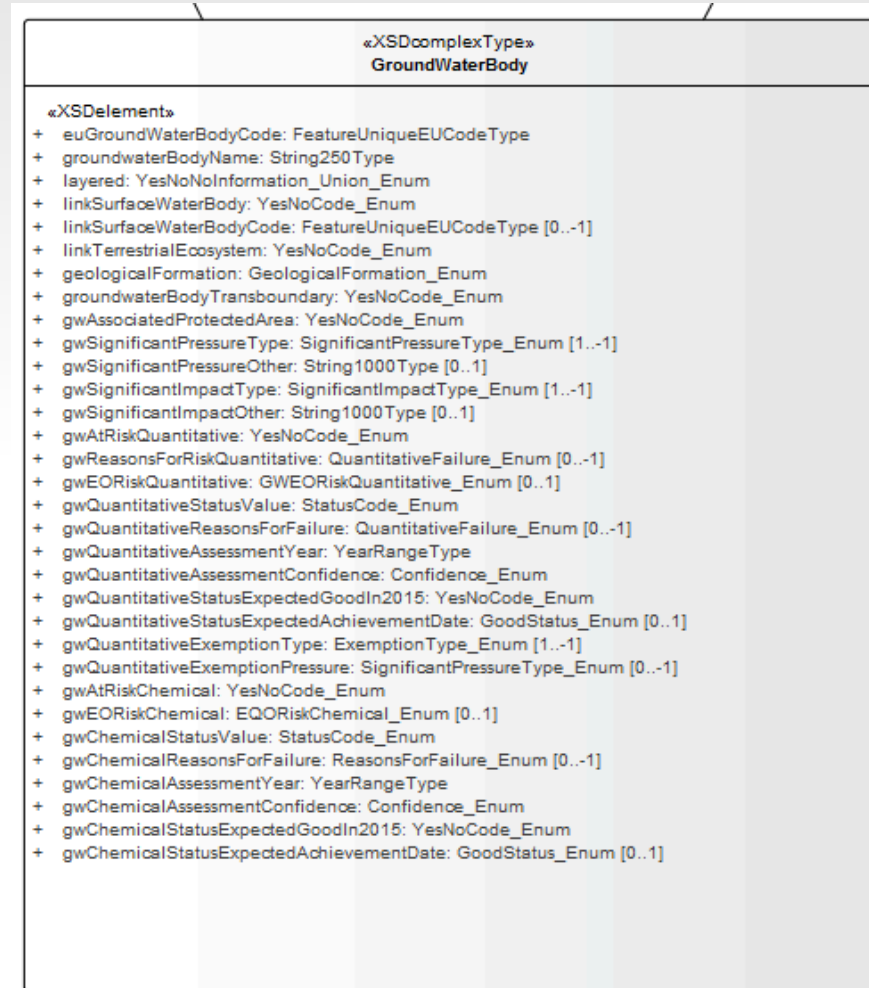
1. Reporting data schema: GWB UML



1. Reporting data schema: GWB UML

Groundwater body

- Unique EU code
- Name
- Layered?
- Linked to surface water bodies?
- Linked to terrestrial ecosystem
- Geological formation (enum)
- Transboundary?
- Associated to protected area?
- Pressures and Impacts
- Risk?
- Quantitative status
- Chemical status

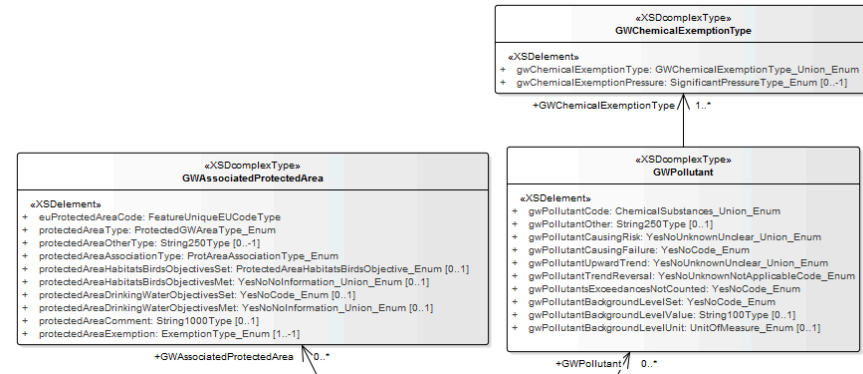


1. Reporting data schema: GWB UML

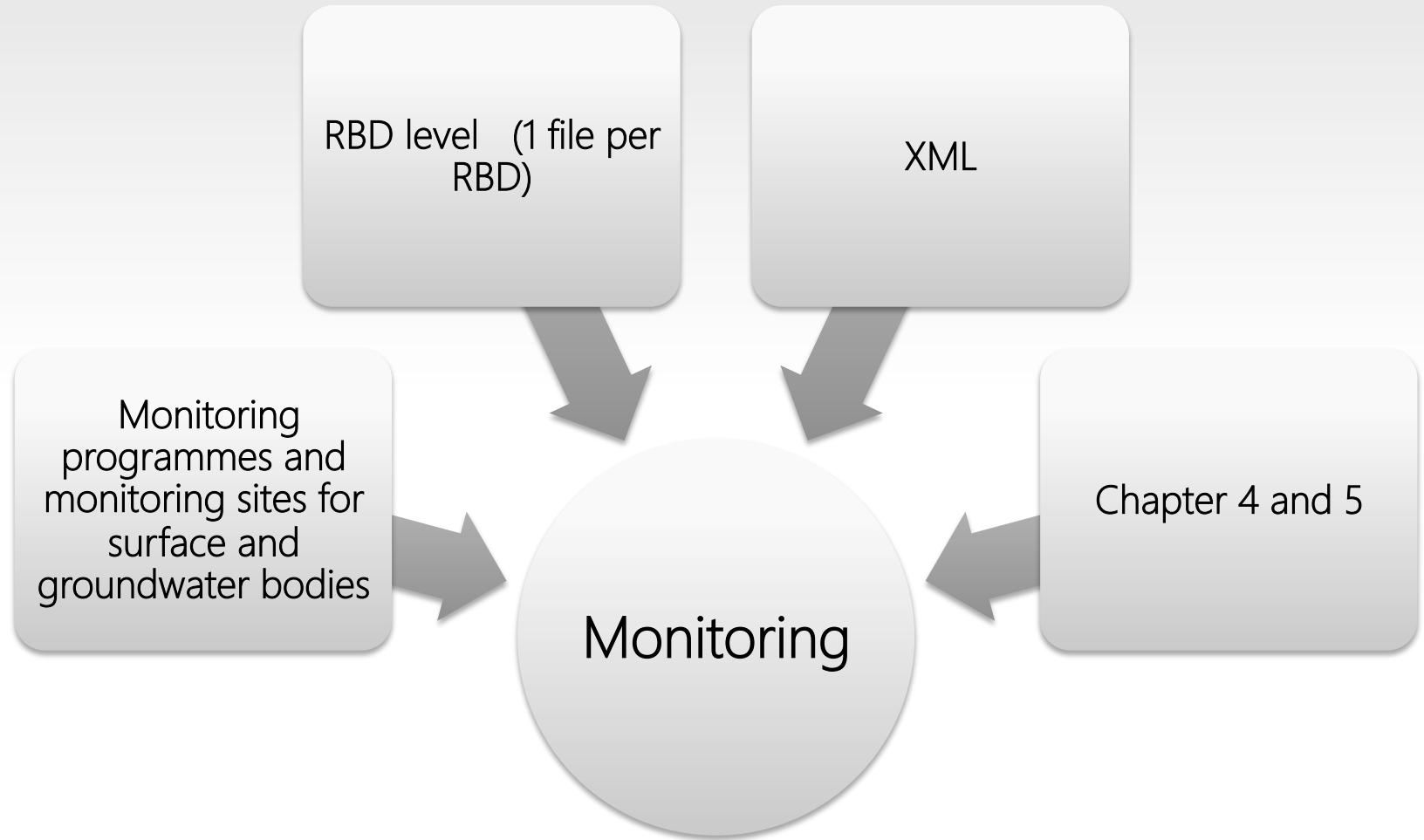
Child classes (3)

- Associated protected area
- Pollutants use chemical substances enumeration (Annex 8e)
- Chemical exemptions related to pollutants

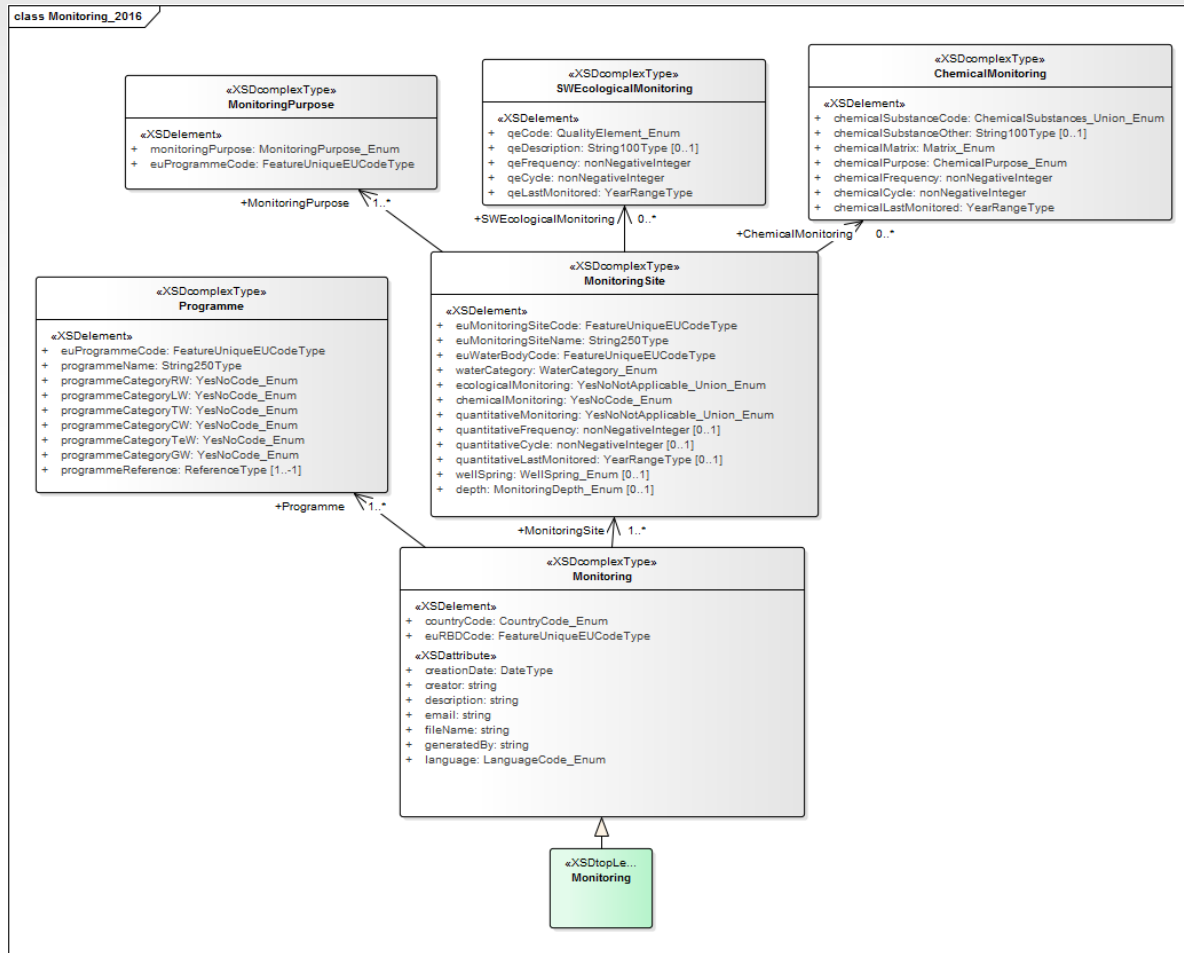
class GWB_2016



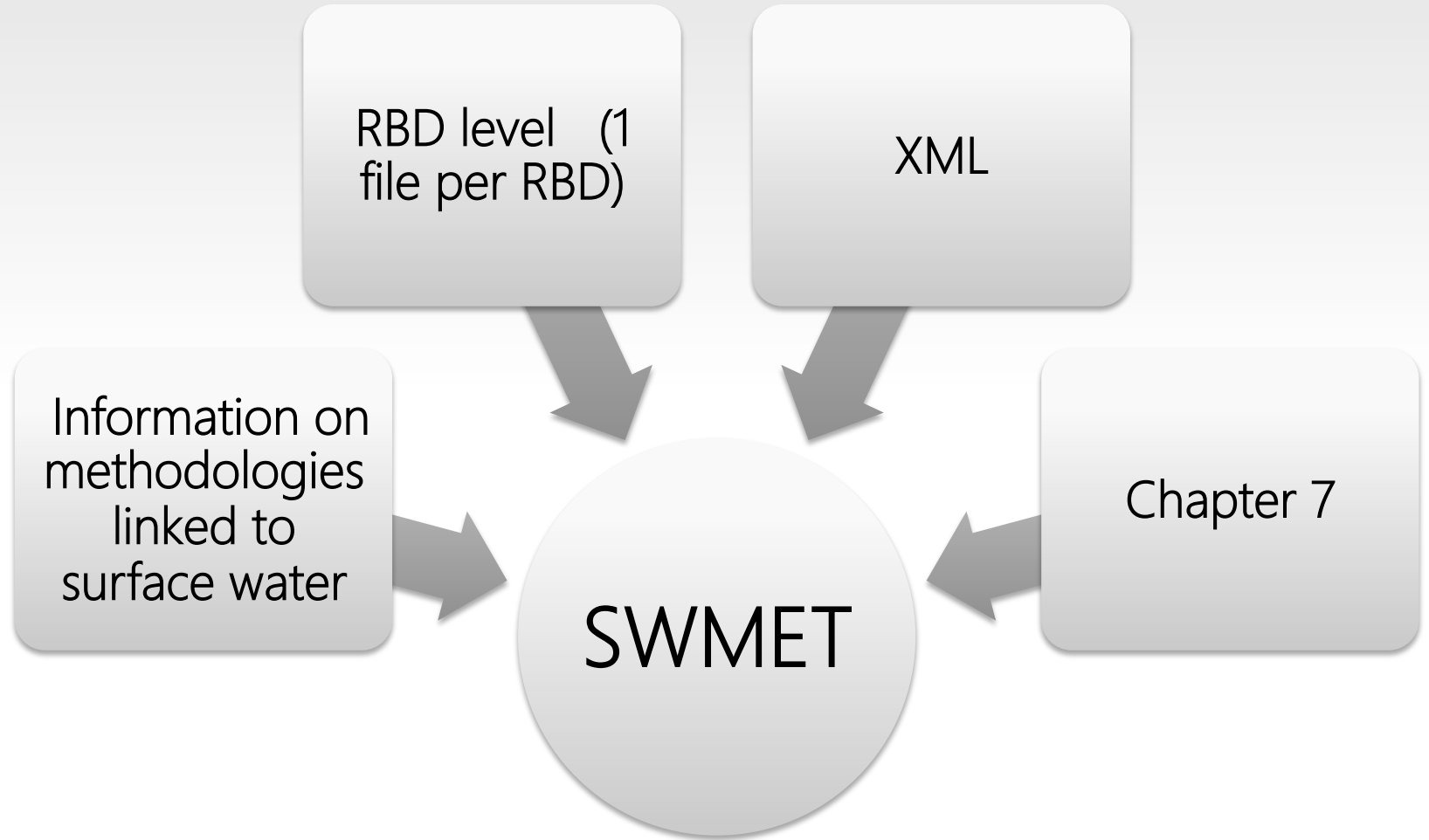
1. Reporting data schema: Monitoring UML



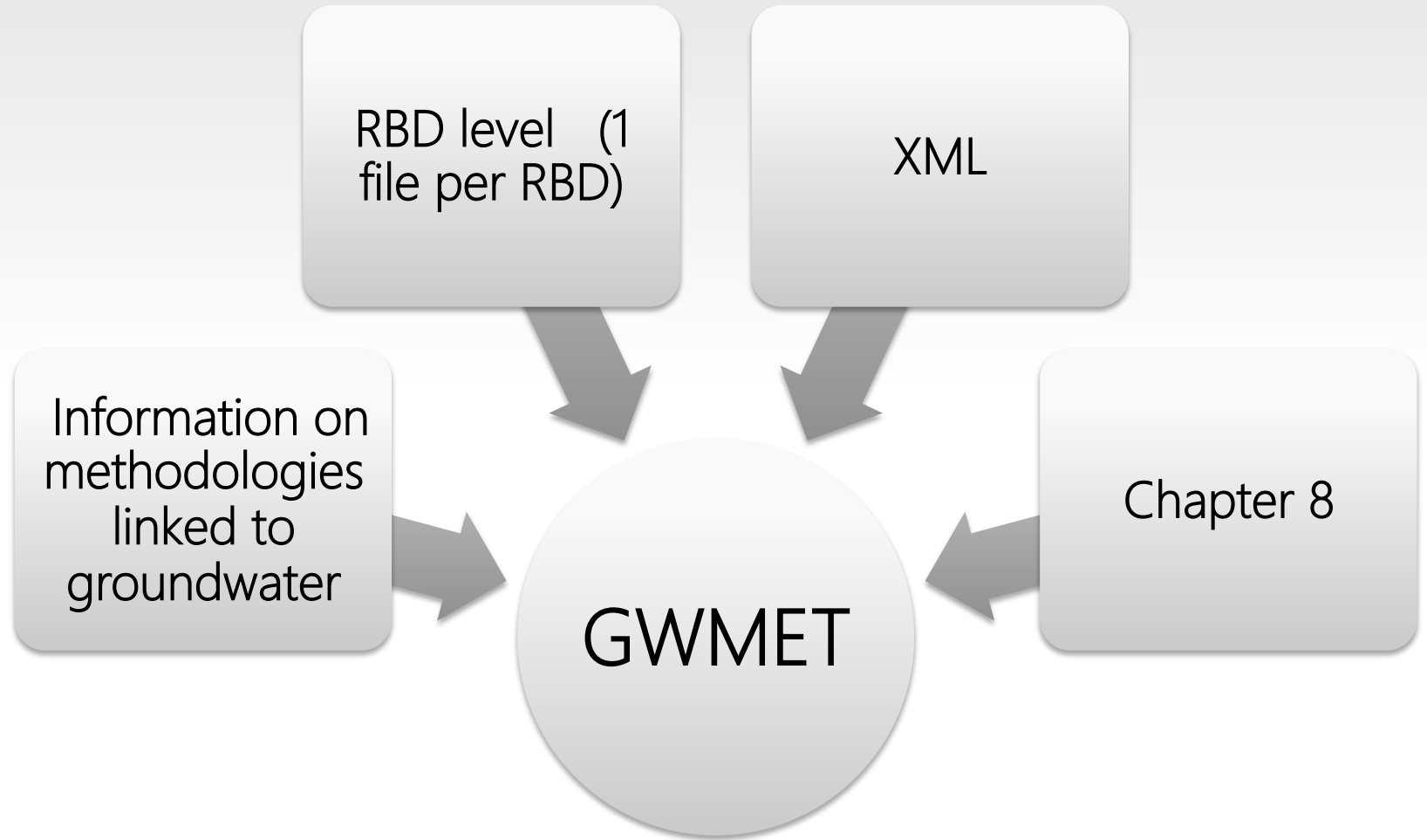
1. Reporting data schema: Monitoring UML



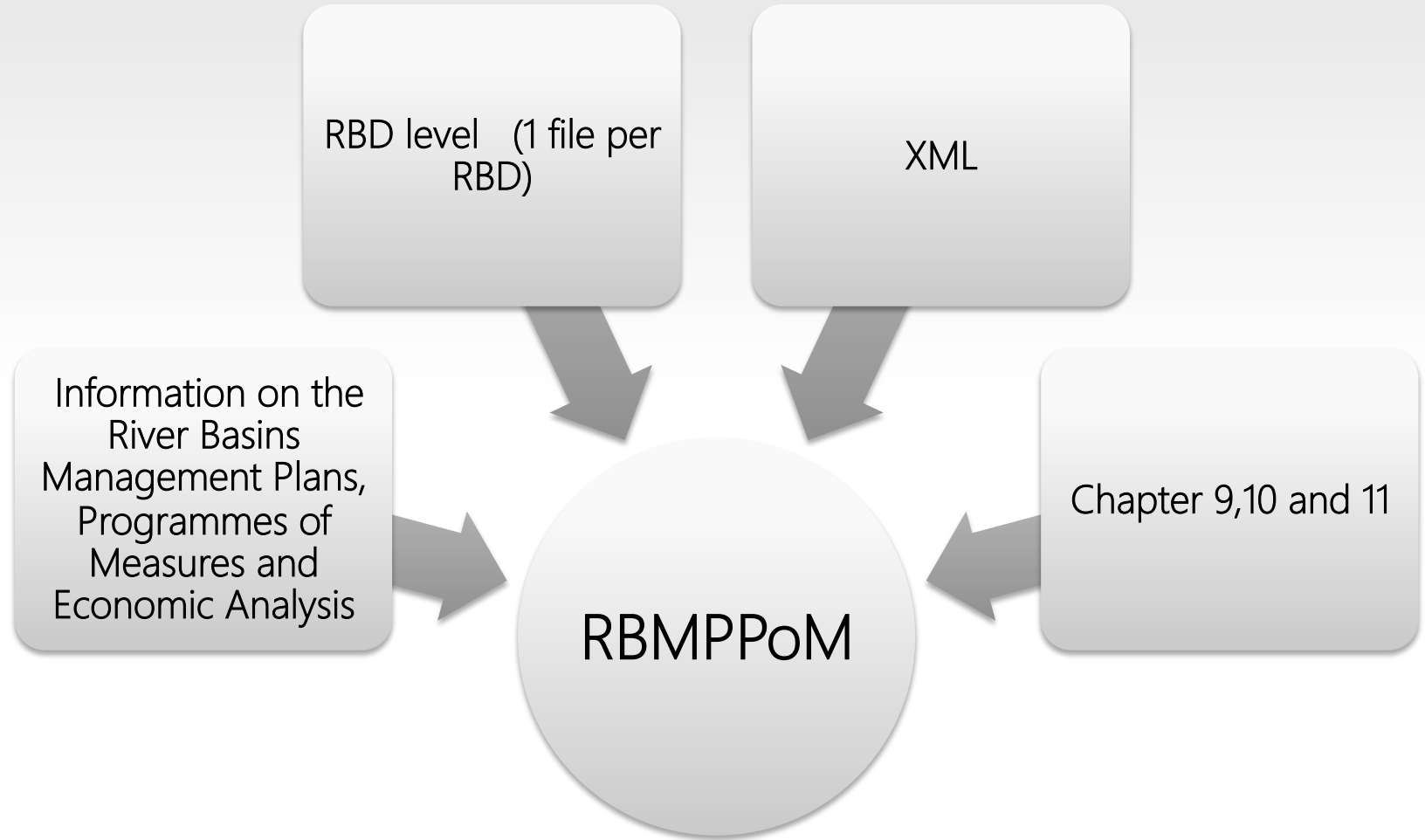
0. Overview



0. Overview

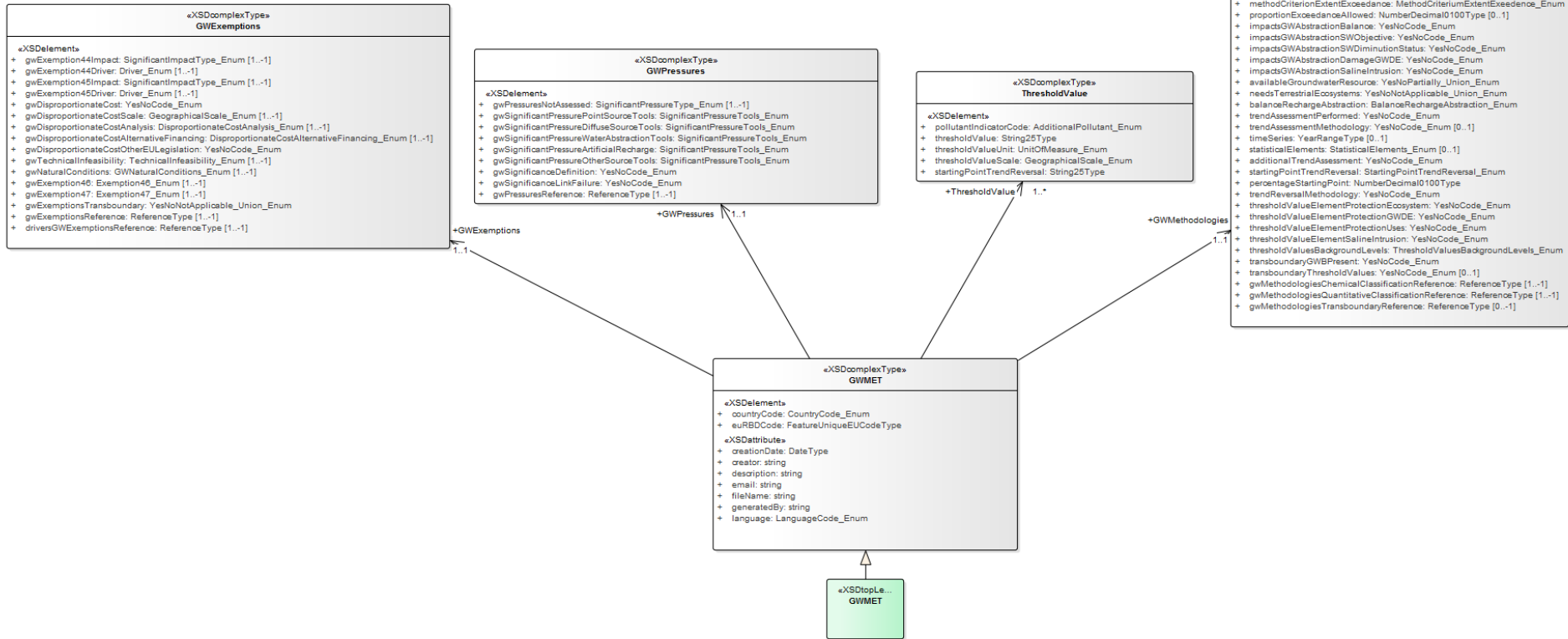


0. Overview



1. Reporting data schema: GWMET UML

class GWMET_2016



3. Quality control elements

Within schema checks

- Validates integrity and correctness on the information reported at schema level (review on the QA documentation)

Schema	Class	Element	Validation
*	<root>	euRBDCode	Element check: First 2 characters must be the Member State's 2-alpha character ISO country code.
SWB	SurfaceWaterBody	euRBDCode	Element check: First 2 characters must be the Member State's 2-alpha character ISO country code.
SWB	SurfaceWaterBody	euSurfaceWaterBodyCode	Element check: EUSurfaceWaterBodyCode must be reported. String length must be within the range of 3 to 42 characters. First 2 characters must be the Member State's 2-alpha character ISO country code. Only one value can be reported.
SWB	SurfaceWaterBody	euSurfaceWaterBodyCode	Within-schema check: euSurfaceWaterBodyCode must be unique.
SWB	SurfaceWaterBody	euSubUnitCode	Element check: String length must be a maximum of 42 characters. First 2 characters must be the Member State's 2-alpha character ISO country code. Only one value can be reported.

3. Quality control elements

Cross schema checks

- Validation against the all the schemas reported under a RBD level

Refer to QA documentation

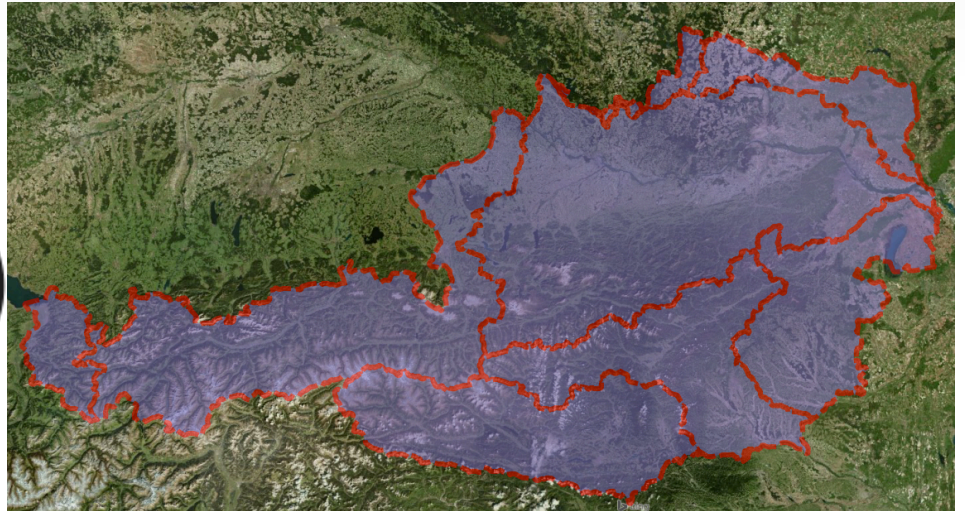
SWB	SurfaceWaterBody	euSubUnitCode	Cross-schema check: The reported EUSubUnitCode must be consistent with the codes reported in <i>RBDSUCA/RBD/SubUnit/euSubUnitCode</i> .
SWB	SurfaceWaterBody	surfaceWaterBodyTypeCode	Cross-schema check: The reported surfaceWaterBodyTypeCode must be consistent with the codes reported in <i>SWMET/SWType/swTypeCode</i> .
SWB	SurfaceWaterBody	surfaceWaterBodyIntercalibrationType	Cross-schema check: SurfaceWaterBodyIntercalibrationType must be consistent with the codes reported in <i>SWMET/IntercalibrationType</i>

3. Quality control elements

Cross schema checks

- Validation against spatial data (Surface water bodies, Groundwater bodies, Monitoring sites)

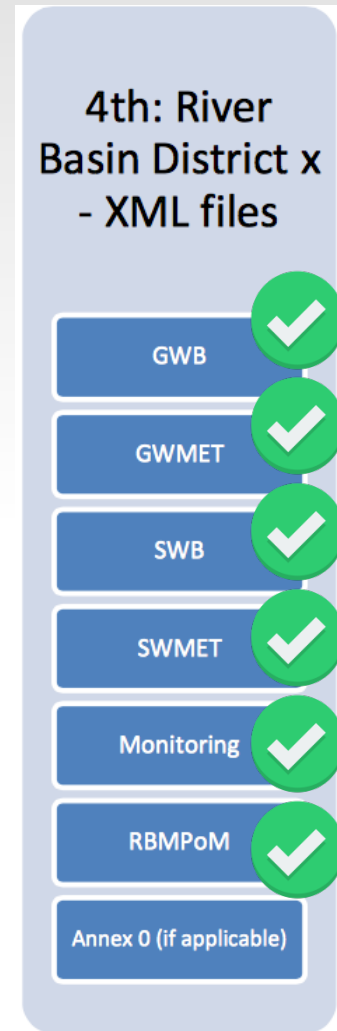
```
<RBD>
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  <rbdName></rbdName>
  <rbdArea></rbdArea>
  <rbdAreaExclCW></rbdAreaExclCW>
  <internationalRBD></internationalRBD>
  <subUnitsDefined></subUnitsDefined>
  <SubUnit>
    <euSubUnitCode></euSubUnitCode>
    <subUnitName></subUnitName>
    <subUnitArea></subUnitArea>
    <subUnitAreaExclCW></subUnitAreaExclCW>
  </SubUnit>
</RBD>
```



3. Quality control elements

Envelope checks

- Validation to check that all XMLs reported reflect to all RDBs XML schemas required



3. Quality control elements

Statistics: Summary (counts)

- Summary of the reported data in the different schemas
- Counts on the information reported for main information elements
- SWB (31), GWB (29), Monitoring (2), SWMET (22), GWMET (12) and RBMPPoM (47)

4. Requirements for data exchange

XML format

- XSD schemas available-Data Dictionary schemas
<http://dd.eionet.europa.eu/schemaset/WFD2016/view>

Access DB format

- Access DB template
- Guide mapping Access DB and Schema elements
- Access to XML converter tool

http://cdr.eionet.europa.eu/help/WFD/WFD_521_2016

4. Requirements for data exchange

File naming convention

- SWB_[Your ISO Country Code]_YYYY-MM-DD
- GWB_[Your ISO Country Code]_YYYY-MM-DD
- Monitoring_[Your ISO Country Code]_YYYY-MM-DD
- SWMET_[Your ISO Country Code]_YYYY-MM-DD
- GWMET_[Your ISO Country Code]_YYYY-MM-DD
- RBMPPoM_[Your ISO Country Code]_YYYY-MM-DD

Questions?



THANK YOU

Alberto Telletxea

atelletxea@bilbomatica.es

Enrique Soriano

jenriquesoriano@guadaltel.es

Mikel Santamaria

msantamaria@bilbomatica.es

Marisa Ruiz

marisarui@guadaltel.es

