

Policy for versioning of the Air Quality IPR e-Reporting XML schema

This briefing document lays down the rules for the versioning of the Air Quality IPR e-Reporting XML schema.

Version numbering scheme

Three levels of version numbering will be implemented:

- i. **Level one:** During the development phase of the schema and for the initial 2013 reporting obligations this number was set to '0' e.g. the 0.3.7c schema was used for the 31 December 2013 deliverables. The next release of the schema will be version '1'. Level one versioning will only change if there is a major rearrangement of the schema to the degree that corresponding software will get a major rewrite – e.g. If we stop using gml:featureMember.
- ii. **Level two:** The level two version number will start at '0' and increment when the schema changes are made in a backwardly incompatible way. Examples of backwards incompatibility:
 - Changes in the URLs of imported schemas
 - Change in target namespace
 - Stricter cardinality rules, e.g. xsd:minOccurs changed from 0 to 1
 - Reordering of sub-elements in complex element types.
- iii. **Level three:** The level three version number starts at '0', but is not strictly numeric. It will be incremented when the schema changes are backwards-compatible. The schema is backwards compatible when *all* earlier deliveries will still validate with the new schema. Examples of backwards compatibility:
 - Introduction of new optional elements and attributes
 - Looser cardinality rules
 - Making mandatory elements and attributes optional

The full version identifier string is encoded in the *version* attribute of the xsd:schema element. It looks like "1.0.5".

The first two levels of the version scheme are encoded in the full URL of the schema location. It is the "-1.0" in the URL:

<http://dd.eionet.europa.eu/schemas/id2011850eu-1.0/AirQualityReporting.xsd>

The target namespace is the same URL without the AirQualityReporting.xsd, as in:

<http://dd.eionet.europa.eu/schemas/id2011850eu-1.0>

This approach will ensure that old schema tools and QA checks won't partially work for XML files that are not backwards compatible with them.

Updates to CDR QA/QC toolsets

For schema updates that are not backwardly compatible the release data will be announced at least two months in advance. This will provide the developers time to update and reissue their tools. Any user who delivers XML files according to the new schema in advance of the release date + 2-months date may find that CDR the QA tools are not fully functional.