

Air Quality e-Reporting: status of implementation & data from AQ models

EEA & ETC/ACM efforts

compiled by Artur Gsella

*FAIRMODE Plenary Meeting
Baveno, 13th of February 2015*



Plan of the presentation

Status of implementation

Transition into harmonised reporting from AQ models

Harmonised format - technical proposal

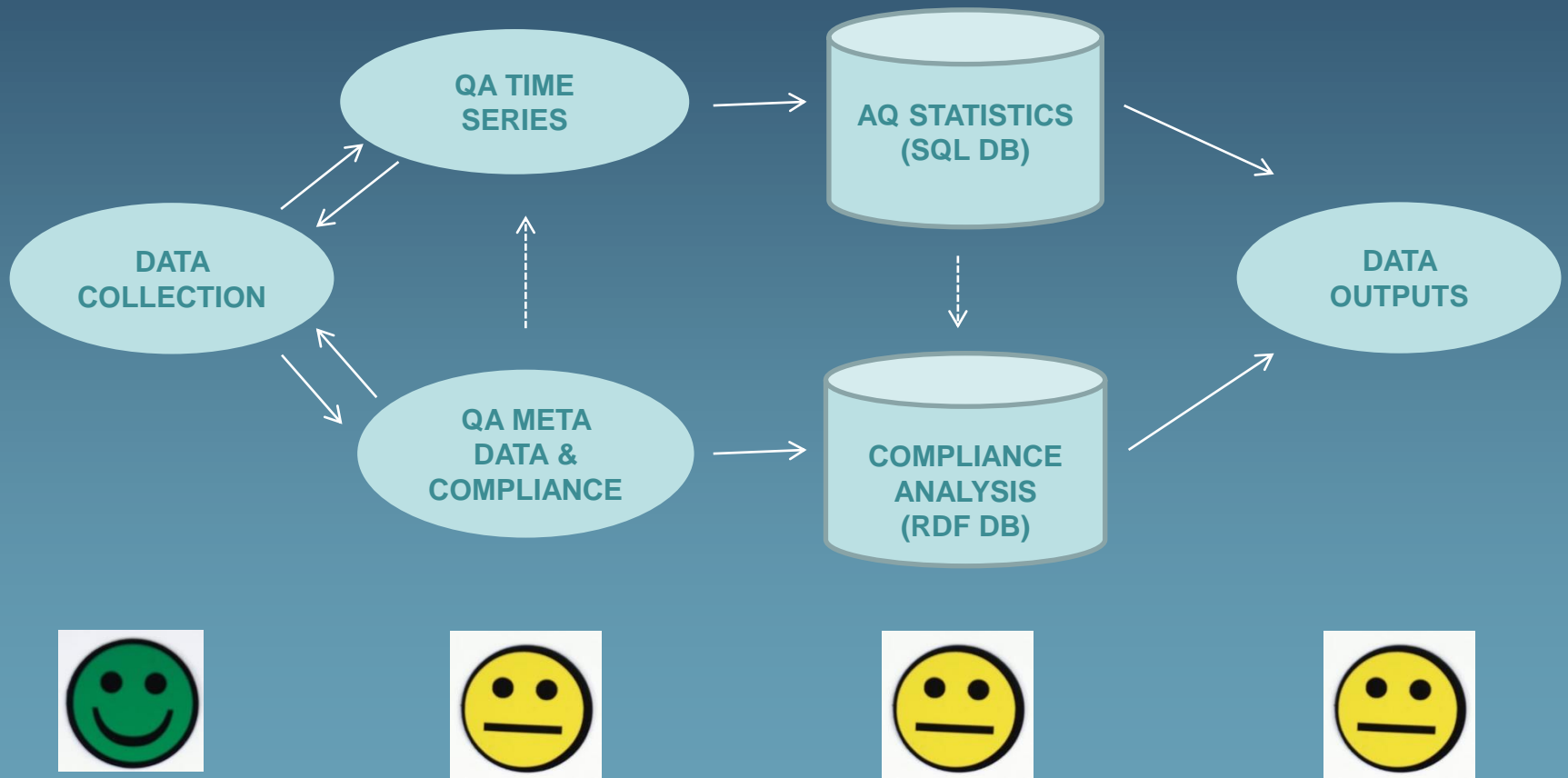


COMMISSION IMPLEMENTING DECISION of 12 December 2011 laying down rules for Directives 2004/107/EC and 2008/50/EC of the European Parliament and of the Council as regards the reciprocal exchange of information and reporting on ambient air quality (notified under document C(2011) 9068)(2011/850/EU):

- Data flow B: air quality management zones
- Data flow C: assessment regimes for zones (sampling points within zones)
- **Data flow D: assessment methods: fixed measurements, air quality models, etc.**
- Data flow E1a: primary validated measurements
- **Data flow E1b: primary modelling results**
- Data flow E2: primary up-to-date measurements
- Data flow F1a: aggregated, validated measurements
- Data flow F1b: aggregated modelling results
- Data flow F2: aggregated, up-to-date measurements
- Data flow G: attainment (aggregation within zones, approved by MS)
- Data flow H: air quality plans
- Data flow I: source apportionment
- Data flow J: scenario for the attainment year
- Data flow K: measures



Status of implementation



Transition into harmonised reporting from AQ models

Outcome of the FAIRMODE survey on e-Reporting suggests that obstacles to report data from AQ modelling are mostly related to compliance reporting.

Reporting format for AQ modelling data has not been harmonised enough to include this information into processing procedures at the EEA.

It is necessary that a harmonised format is accepted and data reports following this format are tested in the EEA system.

Harmonisation process could start with reporting data from AQ modelling using harmonised format for AQ 'exchange of information'.



Transition into harmonised reporting from AQ models

IS IT MANDATORY FOR YOU TO REPORT AQ MODELLING DATA UNDER AQD IPR?

YES

NO

FEASIBLE TO REPORT FOR COMPLIANCE ALSO/ONLY
IN HARMONISED FORMAT UNDER AQD IPR?

FEASIBLE TO TRANSFER AQ INFORMATION
IN HARMONISED FORMAT UNDER AQD IPR?

NO

YES

NO

CONTINUE CURRENT REPORTING

HARMONISED REPORTING



Harmonised format - technical proposal

- Description of model parameters
- Comments on modelling data profile and data quality
- Reporting formats for AQ values



Harmonised format - technical proposal

→ Description of model parameters - additional code lists

- separate code lists with concepts for model characteristics, input, types, applications, etc.
- free-text space for description accompanying each code:

```
▼<ompr:processParameter>
  ▼<ompr:ProcessParameter>
    <ompr:name xlink:href="http://dd.eionet.europa.eu/vocabulary/aq/modelparameter/emissions"/>
    ▼<ompr:description>
      NAET2012 data, scaled forward to 2013 by linear interpolation between 2012 and projected (UEP48) 2013 data.
    </ompr:description>
  </ompr:ProcessParameter>
</ompr:processParameter>
▼<ompr:processParameter>
  ▼<ompr:ProcessParameter>
    <ompr:name xlink:href="http://dd.eionet.europa.eu/vocabulary/aq/modelparameter/chemistry"/>
    <ompr:description>None applicable</ompr:description>
  </ompr:ProcessParameter>
</ompr:processParameter>
▼<ompr:processParameter>
  ▼<ompr:ProcessParameter>
    <ompr:name xlink:href="http://dd.eionet.europa.eu/vocabulary/aq/modelparameter/meteorology"/>
    ▼<ompr:description>
      Maddington met station for 2013 (data acquired from the Met Office). Other met sites may be used for more detailed modelling studies where the national scale modelling/monitoring highlights potential problems.
    </ompr:description>
  </ompr:ProcessParameter>
</ompr:processParameter>
```



Harmonised format - technical proposal

→ Comments on modelling data profile and data quality

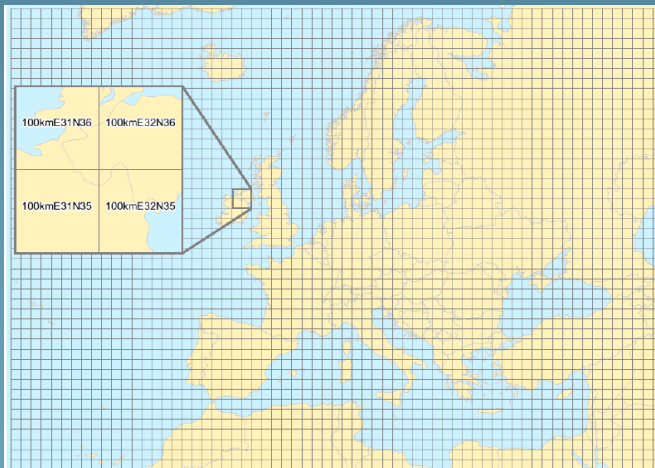
- countries may report E1b values with any temporal resolution which can be considered as 'primary' output from AQ modelling for regulatory purposes
- code list for primary data has been extended (/year)
- relaxing the AQ e-Reporting schema for model uncertainty reported under data flow E1b - feasibility to be evaluated
- harmonised quality assurance (DELTA tool)



Harmonised format - technical proposal

→ Reporting formats for AQ values

- EEA proposed solution with EEA reference grid, it does not impose a single spatial scale but rather a single geometry framework (adaptable to different spatial scales)



- resolution of 1, 10 and 100 km published
- more resolutions feasible

Harmonised format - technical proposal

→ Reporting formats - answering doubts

- only the first bottom layer of the model is expected and yearly values are allowed
- (common) geometry separated from values → data array with values feasible in GML, meta-data will point to geometry
- country modeller teams to re-calculate results from their original geometry into the common one, using 'the best available' interpolation methodology



Harmonised format - technical proposal

→ Reporting formats - answering doubts

- risk of impairing quality of results due to interpolation to be evaluated and summarised in data quality report
- countries would be asked to deliver AQ modelling results on common geometry but they would have freedom to report also the original data (for compliance purposes) and refer to it from the GML files
- harmonisation would significantly facilitate processing data from AQ models at the EEA and in longer term also analysis and visualisations altogether with other AQ data



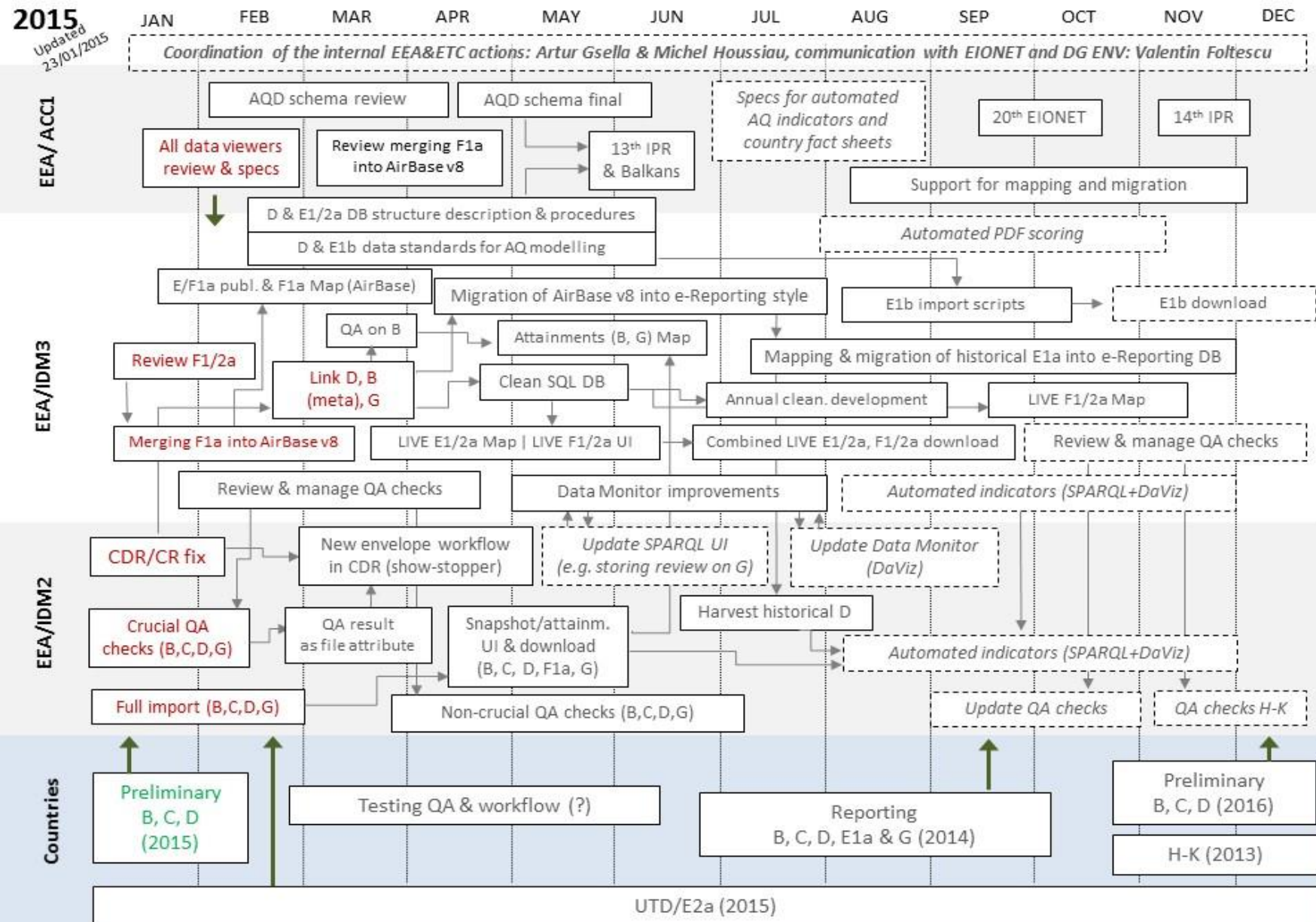
Draft timetable for the e-Reporting of modelling results

(EEA e-Reporting development plan)

- **Consensus** how to report modelling data (generic list of model input parameters, data quality reports, common format for modelling results, possible updates of the data model & AQ-XSD...): **2014**
- Capacity building - **MS ready to report** modelling results in harmonised format: **2015**
- **EEA ready** to ingest the data from models, store it and use it for assessments and analysis: **2015 - 2016**



Air Quality e-Reporting: status of implementation & data from AQ models



for more information about AQ e-Reporting visit:

<http://www.eionet.europa.eu/aqportal>

Thank you for your attention and all efforts on your side!

[**aqipr.helpdesk@eionet.europa.eu**](mailto:aqipr.helpdesk@eionet.europa.eu)



How-to: data array within GML

```
<om:result>
  <swe:DataArray>
    <swe:elementCount><swe:Count><swe:value>2</swe:value></swe:Count></swe:elementCount>
    <swe:elementType name="ModelledObservations">
      <swe:DataRecord>
        <swe:field name="GeometryID">
          <swe:Category definition="http://dd.eionet.europa.eu/vocabularies/aq/geometryidentifiers/1km" />
          <swe:uom xlink:href="http://www.eea.europa.eu/data-and-maps/data/eea-reference-grids-2#tab-gis-data" />
        </swe:field>
        <swe:field name="StartTime">
          <swe:Time definition="http://www.opengis.net/def/property/OGC/0/SamplingTime">
            <swe:uom xlink:href="http://www.opengis.net/def/uom/ISO-8601/0/Gregorian" />
          </swe:Time>
        </swe:field>
        <swe:field name="EndTime">
          <swe:Time definition="http://www.opengis.net/def/property/OGC/0/SamplingTime">
            <swe:uom xlink:href="http://www.opengis.net/def/uom/ISO-8601/0/Gregorian" />
          </swe:Time>
        </swe:field>
        <swe:field name="Verification">
          <swe:Category definition="http://dd.eionet.europa.eu/vocabularies/aq/observationverification" />
          <swe:uom xlink:href="http://dd.eionet.europa.eu/vocabulary/aq/observationverification/1" />
        </swe:field>
        <swe:field name="Validity">
          <swe:Category definition="http://dd.eionet.europa.eu/vocabularies/aq/observationvalidity" />
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        </swe:field>
        <swe:field name="value">
          <swe:Quantity definition="http://dd.eionet.europa.eu/vocabulary/aq/primaryObservation/day">
            <swe:uom xlink:href="http://dd.eionet.europa.eu/vocabulary/uom/concentration/ug.m-3" />
          </swe:Quantity>
        </swe:field>
        <swe:field name="Correction">
          <swe:Quantity definition="http://dd.eionet.europa.eu/vocabulary/aq/primaryObservation/day">
            <swe:uom xlink:href="http://dd.eionet.europa.eu/vocabulary/uom/concentration/ug.m-3" />
          </swe:Quantity>
        </swe:field>
      </swe:DataRecord>
    </swe:elementType>
    <swe:encoding><swe:TextEncoding blockSeparator="@@" decimalSeparator="." tokenSeparator="," /></swe:encoding>
    <swe:values>"1kmE0N1",15,0@@"1kmE0N10",9,0@@"</swe:values>
  </swe:DataArray>
  <gml:TimePeriod gml:id="ReportingPeriod_Timestamp">
    <gml:beginPosition>2013-01-01T00:00:00.000Z</gml:beginPosition>
    <gml:endPosition>2013-12-31T24:00:00.000Z</gml:endPosition>
  </gml:TimePeriod>
  <gml:File>
    <gml:rangeParameters/>
    <gml:fileReference>http://cdr.eionet.europa.eu/gb/eu/aqd/e1b/envu czcg/so213 9973bk etrs89.tgz#VALUE</gml:fileReference>
    <gml:fileStructure>asc11-grid</gml:fileStructure>
    <gml:compression>LZ77</gml:compression>
  </gml:File>
</om:result>
```

definition

values



How-to: data array within GML

```
<om:result>
  <swe:DataArray>
    <swe:elementCount>
      <swe:Count>
        <swe:value>2</swe:value>
      </swe:Count>
    </swe:elementCount>
    <swe:elementType name="ModelledObservations">
      <swe:DataRecord>
        <swe:field name="GeometryID">
          <swe:Category definition="http://dd.eionet.europa.eu/vocabularies/aq/geometryidentifiers/1km" />
        </swe:field>
        <swe:field name="StartTime">
          <swe:Time definition="http://www.opengis.net/def/property/OGC/0/SamplingTime">
            <swe:uom xlink:href="http://www.opengis.net/def/uom/ISO-8601/0/Gregorian" />
          </swe:Time>
        </swe:field>
        <swe:field name="EndTime">
          <swe:Time definition="http://www.opengis.net/def/property/OGC/0/SamplingTime">
            <swe:uom xlink:href="http://www.opengis.net/def/uom/ISO-8601/0/Gregorian" />
          </swe:Time>
        </swe:field>
        <swe:field name="Verification">
          <swe:Category definition="http://dd.eionet.europa.eu/vocabularies/aq/observationverification" />
        </swe:field>
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          <swe:Category definition="http://dd.eionet.europa.eu/vocabularies/aq/observationvalidity" />
        </swe:field>
        <swe:field name="Value">
          <swe:Quantity definition="http://dd.eionet.europa.eu/vocabulary/aq/primaryObservation/day">
            <swe:uom xlink:href="http://dd.eionet.europa.eu/vocabulary/uom/concentration/ug.m-3" />
          </swe:Quantity>
        </swe:field>
        <swe:field name="Correction">
          <swe:Quantity definition="http://dd.eionet.europa.eu/vocabulary/aq/primaryObservation/day">
            <swe:uom xlink:href="http://dd.eionet.europa.eu/vocabulary/uom/concentration/ug.m-3" />
          </swe:Quantity>
        </swe:field>
      </swe:DataRecord>
    </swe:elementType>
    <swe:encoding>
      <swe:TextEncoding blockSeparator="@" decimalSeparator="." tokenSeparator="," />
    </swe:encoding>
    <swe:values>
      "1kmE0N1",2013-10-23T00:00:00+00:00,2013-10-23T23:59:59+00:00,3,1,15,0@"1kmE0N10",2013-10-24T00:00:00+00:00,2013-10-24T23:59:59+00:00,3,1,9,0@"
    </swe:values>
  </swe:DataArray>
  <gml:File>
    <gml:rangeParameters/>
    <gml:fileReference>
      http://cdr.eionet.europa.eu/gb/eu/aqd/e1b/envu_czcg/so213_9973bk_etr89_tgz#VALUE
    </gml:fileReference>
    <gml:fileStructure>ascii-grid</gml:fileStructure>
    <gml:compression>LZ77</gml:compression>
  </gml:File>
</om:result>
```

definition

values



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        <swe:value>2</swe:value>
      </swe:Count>
    </swe:elementCount>
    <swe:elementType name="ModelledObservations">
      <swe:DataRecord>
        <swe:field name="GeometryID">
          <swe:Category definition="http://dd.eionet.europa.eu/vocabularies/aq/geometryidentifiers/1km" />
        </swe:field>
        <swe:field name="StartTime">
          <swe:Time definition="http://www.opengis.net/def/property/OGC/0/SamplingTime">
            <swe:uom xlink:href="http://www.opengis.net/def/uom/ISO-8601/0/Gregorian" />
          </swe:Time>
        </swe:field>
        <swe:field name="EndTime">
          <swe:Time definition="http://www.opengis.net/def/property/OGC/0/SamplingTime">
            <swe:uom xlink:href="http://www.opengis.net/def/uom/ISO-8601/0/Gregorian" />
          </swe:Time>
        </swe:field>
        <swe:field name="Verification">
          <swe:Category definition="http://dd.eionet.europa.eu/vocabularies/aq/observationverification" />
        </swe:field>
        <swe:field name="Validity">
          <swe:Category definition="http://dd.eionet.europa.eu/vocabularies/aq/observationvalidity" />
        </swe:field>
        <swe:field name="Value">
          <swe:Quantity definition="http://dd.eionet.europa.eu/vocabulary/aq/primaryObservation/day">
            <swe:uom xlink:href="http://dd.eionet.europa.eu/vocabulary/uom/concentration/ug.m-3" />
          </swe:Quantity>
        </swe:field>
        <swe:field name="Correction">
          <swe:Quantity definition="http://dd.eionet.europa.eu/vocabulary/aq/primaryObservation/day">
            <swe:uom xlink:href="http://dd.eionet.europa.eu/vocabulary/uom/concentration/ug.m-3" />
          </swe:Quantity>
        </swe:field>
      </swe:DataRecord>
    </swe:elementType>
    <swe:encoding>
      <swe:TextEncoding blockSeparator="@" decimalSeparator="." tokenSeparator="," />
    </swe:encoding>
    <swe:values>
      "1kmE0N1",2013-10-23T00:00:00+00:00,2013-10-23T23:59:59+00:00,3,1,15,0@"1kmE0N10",2013-10-24T00:00:00+00:00,2013-10-24T23:59:59+00:00,3,1,9,0@"
    </swe:values>
  </swe:DataArray>
</om:result>

<gml:file>
  <gml:rangeParameters/>
  <gml:fileReference>
    http://cdr.eionet.europa.eu/gb/eu/aqd/e1b/envu_czcg/so213_9973bk_etrs89.tgz#VALUE
  </gml:fileReference>
  <gml:fileStructure>ascii-grid</gml:fileStructure>
  <gml:compression>LZ77</gml:compression>
</gml:file>
</om:result>
```

definition

values



How-to: data array within GML

```
<gml:File>  
  <gml:rangeParameters/>  
  <gml:fileReference>  
    http://cdr.eionet.europa.eu/gb/eu/aqd/e1b/envu\_czcg/so213\_9973bk\_etrs89.tgz#VALUE  
  </gml:fileReference>  
  <gml:fileStructure>ascii-grid</gml:fileStructure>  
  <gml:compression>LZ77</gml:compression>  
</gml:File>  
</om:result>
```



Status of implementation - data collection

ReportingObligation	ReportingDeadline	CountryNumber	LatestRelease	LegislativeInstrument
(B) Information on zones and agglomerations (Article 6)	2015-09-30	31	2015-01-27T11:50:22Z	Air Quality Directive
<h3>Monitoring of AQD Data Deliveries</h3> <p>Deliveries of time series (E1a/E2a) and related meta-data (D):</p> <ul style="list-style-type: none"> ■ Important QA log files from EEA's database performing aggregation for D, E1a and E2a(UTD) XMLs ■ Current status of validated data (E1a) deliveries ■ Current status of UTD (E2a) data deliveries ■ Current status of UTD (E2a) data deliveries per country <p>Deliveries in the CDR (direct links to queries, click on link and scroll down to see results):</p> <ul style="list-style-type: none"> ■ Number of countries already reporting, per obligation ■ Quick overview of September (2014) data deliveries by country and latest release date ■ Quick overview of December (2014) data deliveries by country and latest release date ■ Data flows delivered, per country <ul style="list-style-type: none"> ■ Files referring to AQD schema, reported for data flow B, per country ■ Files referring to AQD schema, reported for data flow C, per country ■ Files referring to AQD schema, reported for data flow D, per country ■ Files referring to AQD schema, reported for data flow E1a, per country ■ Files referring to AQD schema, reported for data flow E1b, per country ■ Files referring to AQD schema, reported for data flow G, per country <ul style="list-style-type: none"> ■ Files referring to AQD schema, reported for data flow B preliminary, per country ■ Files referring to AQD schema, reported for data flow C preliminary, per country ■ Files referring to AQD schema, reported for data flow H, per country ■ Files referring to AQD schema, reported for data flow I, per country ■ Files referring to AQD schema, reported for data flow J, per country ■ Files referring to AQD schema, reported for data flow K, per country 				
(B) Preliminary information on zones and agglomerations (Article 6)	2015			
(C) Information on the assessment regime (Article 7)	2015			
(C) Preliminary information on the assessment regime (Article 7)	2015			
(D) Information on the assessment methods (Articles 8 and 9)	2015			
(E1a) Information on primary validated assessment data - measurements (Article 10)	2015			
(E1b) Information on primary validated assessment data -modelled (Article 10)	2015			
(G) Information on the attainment of environmental objectives (Article 12)	2015			
(H) Information on air quality plans (Article 13)	2015			
(I) Information on source apportionment (Article 13)	2015			
(J) Information on the scenario for the attainment year (Article 13)	2015			
(K) Information on measures (Articles 13 and 14)	2015			

IPR



Status of implementation - QA on meta data

Back to envelope

Check air quality assessment regimes - Dataflow C

This check evaluated the delivery by executing the tier-1 tests on air quality assessment regimes data in Dataflow C. Red bullet in front of the test result indicates that erroneous records found from the delivery. Blue bullet means that the data confirms to rule, but additional feedback could be provided.

Please click on the "Show records" link to

Checked XML file: http://cdrtest.eionet.europa.eu/es/eu/aqd/c/enwfmsva/ES_C_AssessmentRegime.xml Back to envelope

The envelope is attached to the following obligations:

- <http://rod.eionet.europa.eu/obligations/671>
- <http://rod.eionet.europa.eu/obligations/694>

Check air quality assessment regimes - Dataflow C

This XML file did NOT pass the following crucial checks: C8,C9,C10,C11,C12,C17,C18,C20,C21,C32,C34

This check evaluated the delivery by executing tier-1 tests on air quality assessment regimes data in Dataflow C as specified in [e-reporting QA/QC rules documentation](#).

[How to read the test results?](#)

Test results


C1	Total number of AQ Assessment Regime feature types	2448	Show records
C4	All gml:id attributes shall have unique content within the document or namespace	No duplicates found	
C5	./aqd:inspireId/base:Identifier/base:localId shall be an unique code for the assessment regime.	No duplicates found	
C8	./aqd:inspireId/base:Identifier/base:namespace List base:namespace and count the number of base:localId assigned to each base:namespace.	1	Show records
C7	Each of the number of /aqd:AQD_AssessmentRegime records shall contain a maximum of 1 /aqd:assessmentThreshold/aqd:AssessmentThreshold /aqd:environmentalObjective records per /aqd:AQD_AssessmentRegime element	All values are valid	
C8	./aqd:pollutant xlink:href attribute may resolve to one of Show items	59 invalid values found	Show records
C9	./aqd:pollutant xlink:href attribute may resolve to one of Show items	2404 invalid values found	Show records
C10	Where ./aqd:pollutant resolves to http://dd.eionet.europa.eu/vocabulary/air/pollutant/1 the 3 elements within	1 invalid value found	Show records



Status of implementation - QA on time series

1 of 27


e-Reporting on air quality - Current status - E1a

European Environment Agency 

Report is cached and updates hourly, last update: 07-02-2015 21:00

1 of 27

e-Reporting on air quality - Current status - E2a

European Environment Agency 


Country	Namespace
AT	AT.0008.20.AQ
BE	BE.CELINE-IRCELAQ
BG	BG.BG-EYEAAQ

Report is cached and updates hourly, last update: 07-02-2015 18:00

InspireNamespace PT.APA.AQ, BE - BE.CELINE-IRCE Dataflow E2a, E1a, Unknown

1 of 27

e-Reporting on air quality

European Environment Agency 

Filename	Url	Size (bytes)	Begin	End	Elapsed (sec)	Summary	Link
REP_D-PT_APA_20141223_E-001_TZ_fixed.xml	http://ereporting.blob.core.windows.net/e1a2015/3f02e2a5-5bfa-4d01-b64f-039fe3bc3a1e_REP_D-PT_APA_20141223_E-001_TZ_fixed.xml	111397541	2015-02-07 02:45:02	2015-02-07 16:33:37	49715	Inserted/updated/ignored: 2129190 / 0 / 72 : 2129282	Logfile
MetadataLoad_Dataset_D_be	http://cdr.eionet.europa.eu/be/eaq/d/env/vkmiw	0	2015-02-07 01:40:55	2015-02-07 01:44:23	208		Logfile
MetadataLoad_Dataset_D_be	http://cdr.eionet.europa.eu/be/eaq/d/env/vkmiw	0	2015-02-07 00:37:59	2015-02-07 00:41:38	219		Logfile
E2a_BE20150206.xml	http://ereporting.blob.core.windows.net/e2a2015/0dfa5fb8-50cc-4030-9888-fc274bdee4da_E2a_BE20150206.xml	1828455	2015-02-06 14:36:15	2015-02-06 14:36:36	21	Inserted/updated/ignored: 48 / 289 / 12979 : 13296	Logfile
E2a_BE20150206.xml	http://ereporting.blob.core.windows.net/e2a2015/0b08d69a-5e4b-4c7e-a373-9fa5e8ef65e1_E2a_BE20150206.xml	1823939	2015-02-06 14:06:12	2015-02-06 14:06:38	26	Inserted/updated/ignored: 0 / 280 / 12988 : 13248	Logfile
E2a_BE20150206.xml	http://ereporting.blob.core.windows.net/e2a2015/7b805dde-b0e9-472e-b1d1-622feac0f881_E2a_BE20150206.xml	1824397	2015-02-06 12:36:05	2015-02-06 12:36:33	28	Inserted/updated/ignored: 120 / 313 / 12815 : 13248	Logfile
MetadataLoad_Dataset_D_pt	http://cdr.eionet.europa.eu/pt/eaq/d/env/vintqg	0	2015-02-06 11:48:38	2015-02-06 11:50:40	122		Logfile
E2a_BE20150206.xml	http://ereporting.blob.core.windows.net/e2a2015/25280ab0-06d4-436c-885b-caab0a77ba45_E2a_BE20150206.xml	1817551	2015-02-06 11:36:08	2015-02-06 11:36:40	32	Inserted/updated/ignored: 0 / 255 / 12873 : 13128	Logfile

st delivery date	Delivery
6. Feb 2015 14:00:00	●
6. Feb 2015 15:00:00	●
6. Feb 2015 13:00:00	●
6. Feb 2015 16:00:01	●
6. Feb 2015 15:00:00	●
7. Feb 2015 17:00:00	●
6. Feb 2015 09:00:00	●
6. Feb 2015 14:00:00	●
13. Jan 2015 15:00:00	●
6. Feb 2015 14:00:00	●
6. Feb 2015 15:00:00	●
6. Feb 2015 14:00:00	●
7. Feb 2015 16:00:00	●
7. Feb 2015 05:00:00	●

Status of implementation - AQ statistics and analysis

Data flow C: Assessment Regimes

General information on Assessment Regimes

Assessment Regimes and Methods

Exceedance situations per zone/assessment

Namespace:

Pollutant:

[Back](#)

5 results

Status	Namespace	Assessment	AssessmentType	Zone	ReportingYear	Pollutant	ExceedanceThreshold	ExceedanceAQvalue
UNDER VERIFICATION	BE.CELINE-IRCELAQ	http://reference.eionet.europa.eu/aq/BE.CELINE-IRCELAQ/ARE-BEB10A_00005_fixed_daysAbove	http://dd.eionet.europa.eu/vocabulary/aq/assessmenttype/fixed	http://reference.eionet.europa.eu/aq/BE.CELINE-IRCELAQ/ZON-BEB10A	2013	http://dd.eionet.europa.eu/vocabulary/aq/pollutant/5	35	58
UNDER VERIFICATION	BE.CELINE-IRCELAQ	http://reference.eionet.europa.eu/aq/BE.CELINE-IRCELAQ/ARE-BEF02A_00005_fixed_daysAbove	http://dd.eionet.europa.eu/vocabulary/aq/assessmenttype/fixed	http://reference.eionet.europa.eu/aq/BE.CELINE-IRCELAQ/ZON-BEF02A	2013	http://dd.eionet.europa.eu/vocabulary/aq/pollutant/5	35	36
UNDER VERIFICATION	BE.CELINE-IRCELAQ	http://reference.eionet.europa.eu/aq/BE.CELINE-IRCELAQ/ARE-BEF03S_00005_fixed_daysAbove	http://dd.eionet.europa.eu/vocabulary/aq/assessmenttype/fixed	http://reference.eionet.europa.eu/aq/BE.CELINE-IRCELAQ/ZON-BEF03S	2013	http://dd.eionet.europa.eu/vocabulary/aq/pollutant/5	35	37
UNDER VERIFICATION	BE.CELINE-IRCELAQ	http://reference.eionet.europa.eu/aq/BE.CELINE-IRCELAQ/ARE-BEF05S_00005_fixed_daysAbove	http://dd.eionet.europa.eu/vocabulary/aq/assessmenttype/fixed	http://reference.eionet.europa.eu/aq/BE.CELINE-IRCELAQ/ZON-BEF05S	2013	http://dd.eionet.europa.eu/vocabulary/aq/pollutant/5	35	45
UNDER VERIFICATION	BE.CELINE-IRCELAQ	http://reference.eionet.europa.eu/aq/BE.CELINE-IRCELAQ/ARE-BEW12S_00005_fixed_daysAbove	http://dd.eionet.europa.eu/vocabulary/aq/assessmenttype/fixed	http://reference.eionet.europa.eu/aq/BE.CELINE-IRCELAQ/ZON-BEW12S	2013	http://dd.eionet.europa.eu/vocabulary/aq/pollutant/5	35	48

Exceedance situations per sampling point



Status of implementation - data outputs

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Test area

BETA Air Quality Data & Reporting

Pollutant: **PM10 : Particulate matter < 10 Åµm (aerosol)**

Country: **BE**

Validity: **-99 : Not valid due to station maint**

Area classification: **Not classified, Rural, Rural-Near_ci**

Up-to-date Air Quality Data Viewer - Hourly PM10

Air Quality e-Reporting from EEA Member Countries

e-Reporting or

Note: E1a data from 2014 is

Important: The Resulttime gives

Statistics: Annual mean

Pollutant: PM10 : Particulate matter < 10 Åµm (aerosol)

Country	Namespace
BE	BE.CELINE-IRCEL.AQ

Air Quality statistics analysis

description goes here

1 of 2 ?

You are here: Home / Air Quality statistics analysis

search term

Details	observationVerification	samplingPoint	samplingPoint latitude	samplingPoint longitude	endPosition	aggregationType
Details	Not verified	ES1819A_Pb_06083001_19_M	38.9075000001	-6.33805999985	2014-01-01T00:00:00Z	Annual mean / 1 calendar year
Details	Not verified	ES1393A_As_04013004_17_M	36.8413299997	-2.44671999988	2014-01-01T00:00:00Z	Annual mean / 1 calendar year
Details	Not verified	ES1601A_NI_06015001_62_M	38.8876300003	-7.0114499998	2014-01-01T00:00:00Z	Annual mean / 1 calendar year
Details	Not verified	ES1549A_PM10_04902001_10_49	36.7697199997	-2.81096999968	2014-01-01T00:00:00Z	1 year day exceed 50
Details	Not verified	ES1546A_PM10_04035001_10_49	37.2522300003	-1.77083000017	2014-01-01T00:00:00Z	1 year 90.41 percentile
Details	Not verified	ES1393A_PM2.5_04013004_9_M	36.8413299997	-2.44671999988	2014-01-01T00:00:00Z	Annual mean / 1 calendar year
Details	Not verified	ES1786A_O3_04013005_14_6	36.86495	-2.39049999963	2014-01-01T00:00:00Z	1 year daymax max 26
Details	Not verified	ES1393A_BJF IN PM10_04013004_97_M	36.8413299997	-2.44671999988	2014-01-01T00:00:00Z	1 year day exceed 50

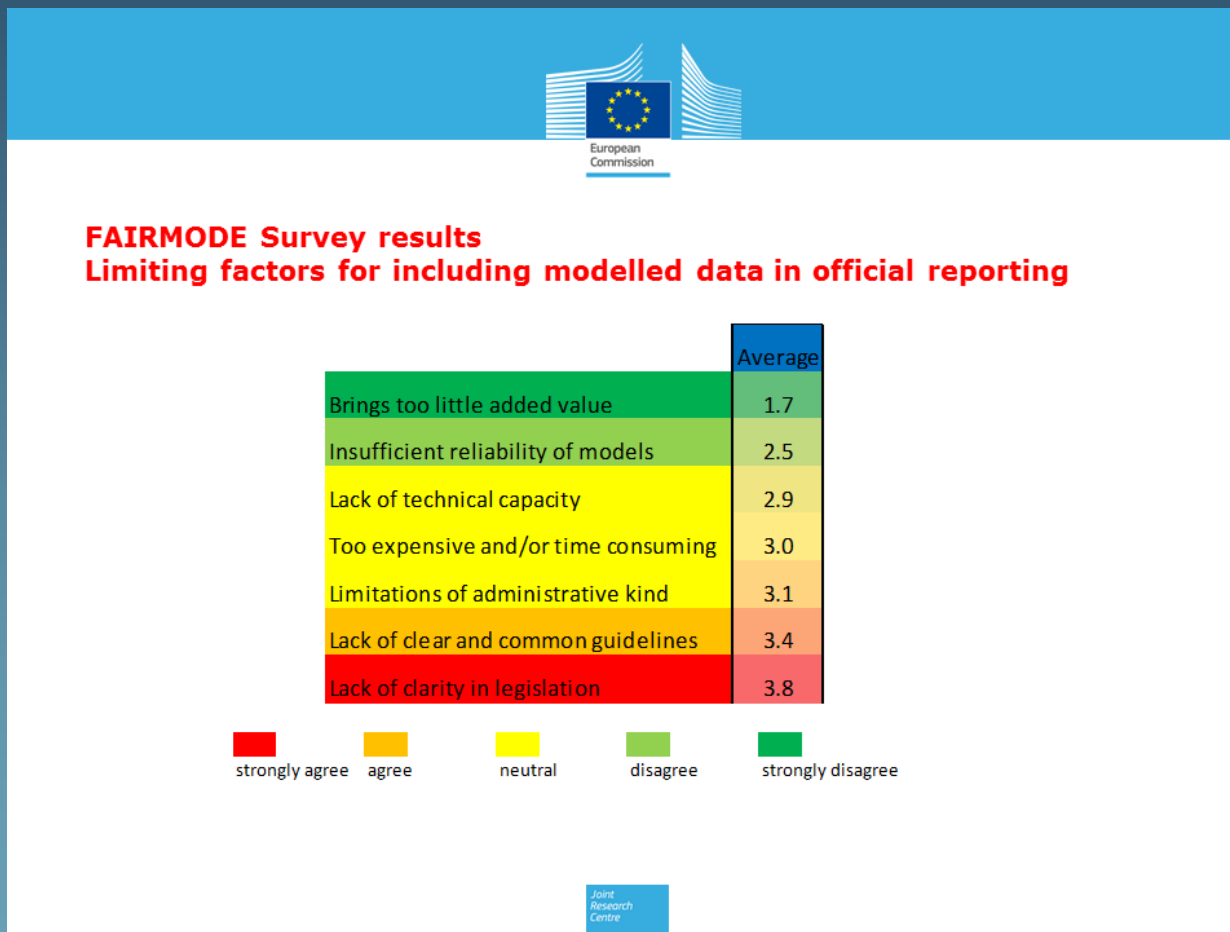
Hourly UTD PM10

PM10 hourly (1:2,000,000-)

- 0-20
- 20-35
- 35-50
- 50-75
- 75+

European Environment Agency

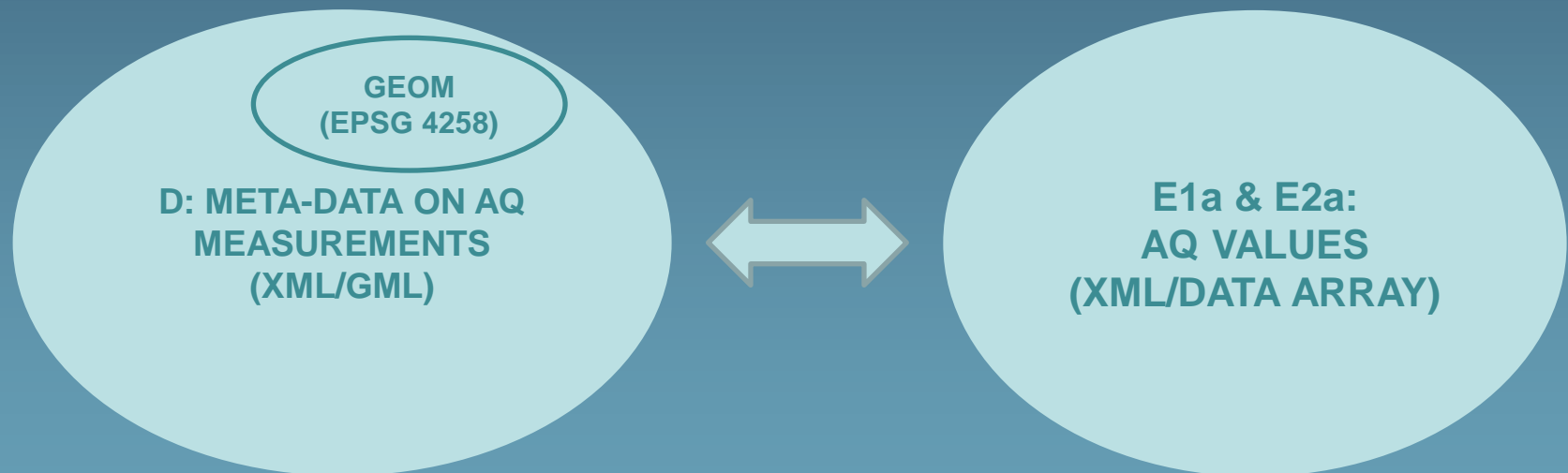
Transition into harmonised reporting from AQ models



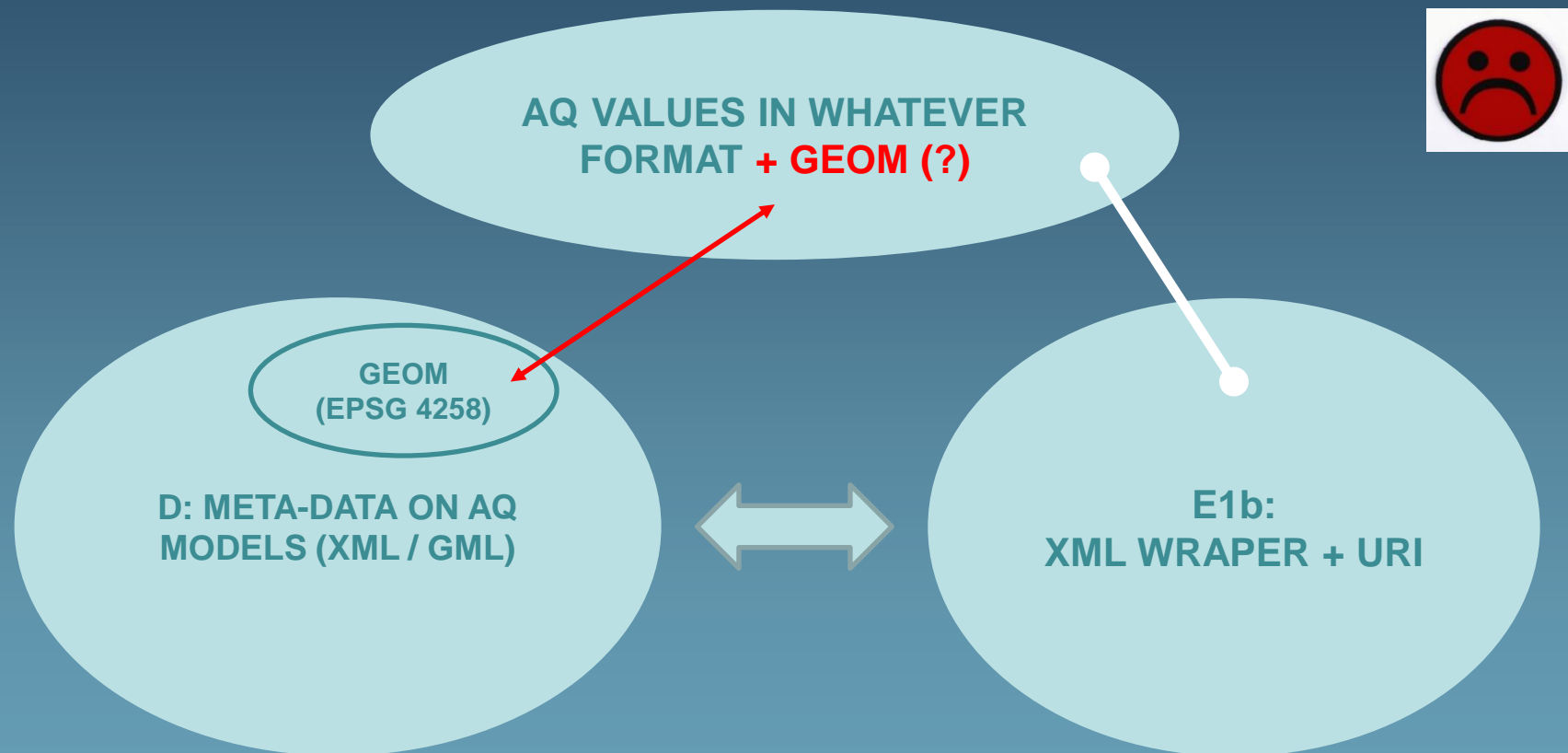
Transition into harmonised reporting from AQ models



...example to follow:



Transition into harmonised reporting from AQ models



Transition into harmonised reporting from AQ models

