Minutes of meeting
6th Air Quality IPR Technical Meeting

European Environment Agency
Kongens Nytorv 6 – 1050 Copenhagen
5 – 7 November 2018

The sixth TIPR meeting was held on 5th to 7th of November at the **European Environment Agency (EEA) in Copenhagen. The meeting was divided into two parts:**

- **Plenary session with all countries on 6th November.**
- **Sessions with sub-group of countries on 5th and 7th November.**

Conclusions from Plenary Session

Main items discussed at the sixth IPR Technical Meeting included:

(1) Update on the Fitness Check of the Ambient Air Quality Directives.
(2) Overview of September's submission status and discussion on the earlier deadline for resubmitting data.
(3) Quality checks for B to G data flows: modifications done and planned.
(4) New recommendation and procedure for H to K data flows submission.
(5) Reporting natural sources contribution through E1b.
(6) Reporting on models and objective estimation.
(7) Overview of new and future viewers/tools for visualising data and information on E1b data flow and UTD data.
(8) Automation of the Air Quality Report.
(9) Importance and quality of meta-information reported in D data flow.
(10) Discussion on technical points: reporting uncertainty, PM adjustment, and ozone cross-section.
(11) Verification of September submission in sub-groups with support provided by the ETC/ATNI.

Key aspects from 6th TIPR (including all days)

- The submissions this year have been earlier than usual, with a peak a week before the deadline. Despite some issues on the side of the QAs and data harvesting, submission was successful for all countries except Kosovo*, with very few countries completing their reporting after the deadline.
- Splitting the verification process with the Member States into sub-groups was highly successful. This allows a one-on-one interaction with the representatives on a problem-solving approach.
- The resubmission deadline for B to G data flows on the 25th of November this year. In 2020 the deadline will be 10th of November. Some countries indicated that this might require significant modifications of their internal processes in collecting data from their networks. Representatives of reporting countries are incentivised to report their data as soon as possible and get their

feedback as early as possible. Considering the deadline, the IPR technical meeting aiming at checking the submission will be held at the end of October 2020 to allow the reporting countries to make the necessary adjustments in a timely fashion.

- This meeting was mainly focused on B to G data flows. A one-day IPR technical meeting focusing on H to K data flows will be organised in April 2020.
- Most of the countries informed that they were satisfied with the viewers functionalities. However, the representatives have proposed slight changes to improve the readability of the data/information.
- The countries consider that more guidance is necessary particularly as it concerns objective estimation. Some countries have shown interest on working with the DG Environment on elaborating recommendations.

Action points for EEA and ETC/ATNI

- Reported issues with the viewers need to be fixed.

Action point for countries

- Some countries need to resubmit some of the September deliverables by the 25th of November.

Specific topics and minutes per session

Tuesday, 5 November

Verification of September submission for Austria, Belgium, Denmark, Finland, France, Hungary, Iceland, Ireland, Latvia, Lithuania, Luxembourg, the Netherlands, Norway, Poland and Sweden.

No attendance from Gibraltar, Switzerland and United Kingdom.

Wednesday, 6 November

Chaired by Catherine Ganzleben (EEA)

Session 1: **Update on EU Clean Air Policy (Thomas Henrichs, DG Environment)**

- COM(2018)330 emphasizes urgent need to improve air quality through full implementation of air quality standards – for now, compliance gaps remain.
- The European Commission continues to support implementation by Member States – such as via Clean Air Dialogues, or via funding opportunities.
- The on-going Fitness Check seeks to understand what works well, and what could work better: whether the Directives are fit for purpose.

- EU Court of Auditors have recommended an update of the AAQ Directives, e.g. advance dates of reporting, precision of requirements for monitoring, …

See presentation from DG Environment.

Session 2: **AQ eReporting implementation**

1. **Overview of September 2019 submission status (Artur Gsella, EEA)**

- Status of data reporting was presented and efforts by the reporting countries were acknowledged for reporting in a timely manner.
- Countries were reminded of the deadline for resubmitting the 2019 data: 25th of November. After this date, resubmission is allowed only if justification is provided to and accepted by DG ENV.
- There was still some instability of the IT system at the EEA. However, the EEA is working on a new system, Reportnet 3, that will be more flexible and presenting more functionalities: Reportnet3. Procedures might be slightly different, but the requirements stay the same. There will be training to facilitate the transition, but the migration of B to G to the new system should not occur before 2022 at the earliest.

2. **Quality checks: modifications done and planned (including coherence with C preliminary and full reporting of E1a and E1b) (Jaume Targa, ETC/ATNI)**

- Status of the quality checks implemented and what new checks will be available, particularly for E1b.
- Discussion on the reporting of negative values and how CDR QC responds. Topics such as the range currently allowed enough for the reporting needs and sampling points reporting negative annual mean. The ranges will be possibly reviewed but the time series for the sampling point will still be flagged (error), as the time series should have a positive annual mean. Reporting countries are encourage to contact helpdesk to improve or add specific country ranges' allowances.
- Discussion on reporting or not closed stations, agreeing that it must be reported regardless of data for compliance or not. Missing information on closed station will result in a blocker and possible deletion of submitted primary data.
- Specific request from Sweden, if the station name could be included in CDR QC feedback. Response from EEA-ETC/ATNI: if link to the station name is straight forward, the team will work in improving output from QC.

3. **New recommendation and procedure for H to K data flows submission (Evrim Ozturk, EEA)**
   - Status of the quality checks implemented and what new checks will be available.
   - Discussion on how to submit the H to K data and deadlines.
   - Recommendation for the submission in 2019 (this recommendation will become mandatory from 2020)
     - For each separate data flow (H, I, J and K), submit all the XML files in one single envelope.
     - If possible, submit one single file by merging the different files.
   - Recommendation for the re-submission in 2019 (this recommendation will become mandatory from 2020):
     - For each separate data flow (H, I, J and K), resubmit in one single envelope the totality of the XML files previously delivered: the modified ones but also the unmodified ones.

  - If possible, submit one single file by merging the modified files with the unmodified ones.
- Deadline for submission is on the 31st of December, and the data H-K can be resubmitted any time. To resubmit, the recommended procedure is to create a new envelop instead of additions to the one submitted initially, and to resubmit all the files (modified or not) previously submitted.

4. Reporting on correction of natural sources (Jaume Targa, ETC/ATNI)

- Discussion on how to report on correction of natural sources. Some countries report in E1b some only in G.
  - If any correction is in place, depending on the method applied for the correction the correction should be reported in E1b.
  - Guidelines are available on how to do this correction (see 5th IPR technical meeting)
  - Note: the countries do not provide corrected data in E1a, meaning that the AQ report is done with non-corrected data (natural sources). Representative of reporting countries are requesting that this is explained in the AQ report or indicate the difference between corrected and non-corrected.
- EEA-ETC/ATNI noted that the guidelines provided in 5th TIPR may have not been fully followed this year's submission.
- Many reporting countries have correction protocols but only report in G if the concentrations exceed limit values.

5. Reporting on models & objective estimation (Jaume Targa, ETC/ATNI)

- Less than 10 MS reporting objective estimations and, amongst these, there are differences: e.g., separate methods for points across the country, using a model as complementary assessment method to already existing observations, and reporting exceedances if the model reports exceedances even if measurements do not.
- Reporting members are requesting more guidance on how to use model data to assess exceedances to be reported in G data flow. Guidance needed regarding uncertainty of a model.
- In at least one Member State, national courts have ruled that exceedances identified based on air quality modelling (and done in accordance with the provisions of the Directive 2008/50/EC) should be duly reported as exceedance situation (i.e. in Dataflow G).
- Discussion on the flexibilities related to monitoring networks provided via Annex III of Directive 2008/50/EC, and their implications for reporting of air quality data. The representative of DG ENV stressed that sampling points shall be sited in such a way as to provide data for each air quality zone for both (a) where the highest concentrations occur, and (b) other areas which are representative of the exposure of the general population. *(The siting of sampling points for where the highest concentrations occur should consider indicative measurements and modelled data pointing to highest concentrations, as appropriate).*

Session 3: New viewers/tools and future developments

1. E1b viewer and integration of E1b results into other viewers (Artur Gsella, EEA)

- Status of the new viewer for E1b. This viewer will be soon made available at the AQ portal.

2. UTD submission at station level viewer (Jaume Targa, ETC/ATNI)

- Status of UTD data reporting and go through the viewers to visualise the data availability in near real time. A link to the viewer will made available soon.
- Discussion on how frequently reporters update the UTD data. EEA-ETC/ATNI advises to check the viewers for possible dropouts and data quality. It was stressed that the viewer will show

data that were reported, unless records are flagged as invalid. In case of data correction, the reporters are advised to submit the corrected data as soon as possible via ftp. If reporter use SOS service, they should contact helpdesk.

- Discussion on the metadata. D must be resubmitted when there are changes in the network. D can be resubmitted any time.

3. New version of the AQ Index (Michel Houssiau, EEA)

- Discussion on the new version of the AQ index which is now more focusing on health. Currently the landing page of the viewer shows AQ Index with 6 hours delay, a compromise between data availability and decent visualisation. Note that the levels and bands might not be so informative for many countries, but this is a compromise between information to public but also between the concentrations across Europe.
- Discussion on health impact assessments: the EEA is planning to work together with WHO to provide guidelines on the combination of premature death and morbidity impact.

4. **Automation of Air Quality Report** (**Jaume Targa, ETC/ATNI)**)

- ETC/ATNI presented the work done to automate the Air Quality Report with validated data. Description of the steps to build an automatized AQ report and what it implies for reporting countries. The report might be an online product but it will also be possible to print the report. This report will be complemented with technical reports published by the EEA or ETC/ATNI.
- EEA-ETC/ATNI also mentioned that some interim or preliminary air quality reports might be produced using UTD data at the beginning of the year.
- Comment from Germany on possible interim UTD report: Germany mentioned about possible discrepancies between the data published in the AQ report and what is reported to local authorities, including lack of passive sampling data. Particulate matter is the most worrying pollutant due to the need of applying correction factors.
- Reporting countries representatives were assured that there will would be annotations in the AQ report (if using UTD data) to ensure that all the details are clarified (only using automatic data, data not fully validated etc…).
- DG environment stresses how important it is to use more UTD data to avoid the time lag between E1a data reporting and the current year.

<u>Session 4:</u> **Importance and quality of meta-information**

Joana Soares made a presentation on “Reporting metadata and the current classification of sampling points”.
Matthew Ross-Jones presented the Swedish platform for e-Reporting and their new metadata editor.

Matthew Ross-Jones suggested that EEA-ETC/ATNI should do the Mapping between type of instrument and the methods, so would be less data needed to be reported. Response EEA: this would conflict with the current QC and reporting data model.

<u>Session 5:</u> **Discussion on technical points**

1. Reporting uncertainty (Michel Houssiau, EEA)

- Discussion on how important it is to report the uncertainty of the data reported, to assure the quality of the data. In the present system, the uncertainty is reported only for the raw data. But from the Directive, the uncertainty should also be reported for the aggregation at the

concentration level of the standard. Soon or later, it will be necessary to report the uncertainty.

- Many representatives do not know how to assess the uncertainty of the data reported. Guidance is required.

2. PM adjustment to reference method - tour de table about current practices) (Jaume Targa – ETC/ATNI)

EEA-ETC/ATNI asked how PM treat PM data from automatic data both in UTD and primary validated data (and if adjustment factors are known and stored).

- NL: correction factor at the end of the year so the UTD data are being corrected with previous years' factor.
- BE: UTD= validated, correction factors are used all the time based on reference methods and gravimetric(?) comparison, and then changed asap.
- NO: An automated measurement method is considered equivalent to the reference method when the measurement results of the automated method multiplied by a correction factor equals the results of the reference method. We are worried that using one correction factor at all sites for a certain measurement method might not be adequate. The Norwegian Reference Laboratory recently conducted an inter-comparison to establish correction factors for PM10 and PM2.5 for most automated measurement methods used in Norway. The results show that the optical instruments tested have increase in bias when the relative humidity increases, and that both the location and season also affects the measurements. As an example: The Grimm correction factor was found to change from 1.4 to 0.8 when the reference laboratory moved it from a street location in the autumn to another street location in the winter, both in the same city. Establishing and applying site and season specific correction factors to automated analysers is a huge challenge.
- One MS**:** PM Correction factor included in the automatic instrument. Manual sampling points do have the correction factor for each year, reference sampler goes around the stations to check the correction factor.
- SE: some issues as Norway, so the results are difficult to understand. A general correction factor not always can be applied because it varies year to year.

3. Modification of ozone cross-section (Michel Houssiau, EEA)

Discussion based on work done by Frank de Leeuw, which shows that changing ozone cross-section will result in an increase of ozone concentrations and hence a significant increase of exceedance cases (in particular for AOT40). The change of cross-section would occur in 2022, once adopted by the BIPM.

- AT: EEA should evaluate the increase on exceedances by modifying the hourly values according to the new cross-section.
- DE: ongoing discussion in Germany.
- CY: why is it needed? Why don't we increase the limit value?
- PL: is this just for historical data or is it an issue for the future?
    - EEA: there will probably be an increase of ozone exceedances, independently of historical or not.
- DE: is it something which did already changed in the past?
    - EEA: We do not know.
    - ETC/ATNI: since we don't know, then maybe we should not consider it.
- AT: limit values where set on the concentration that where in principle with that issue inherited so why now changing them.

Thursday, 7 November

Verification of September submission for Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czechia, Estonia, Germany, Greece, Italy, Kosovo*, North Macedonia, Malta, Montenegro, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Turkey.

No attendance from Montenegro.