Distr.

**GENERAL** 

CEIP/Adjustment RR/2014/FRANCE 01/09/2014

**English ONLY** 

# Review of the 2014 Adjustment Application by France

Expert Review Team Report for the EMEP Steering Body

| Report title     | Review of the 2014 Adjustment Application by France |  |  |
|------------------|-----------------------------------------------------|--|--|
| Country          | FRANCE                                              |  |  |
| Report reference | CEIP/Adjustment RR/2014/FRANCE                      |  |  |
| Date             | 05/08/2014                                          |  |  |
| Version no       | V1                                                  |  |  |
|                  |                                                     |  |  |

# **Expert Review Team**

| Role                                             | Sector                                  | Name                   |
|--------------------------------------------------|-----------------------------------------|------------------------|
| Adjustment lead reviewer                         | All                                     | Chris DORE (UK)        |
| Primary expert reviewer                          | Off -road mobile machinery (1.A.2.f.ii) | Michael KOTZULLA (GER) |
| Secondary expert reviewer                        | Off -road mobile machinery (1.A.2.f.ii) | Yvonne PANG (UK)       |
| Primary expert reviewer Road Transport (1.A.3.b) |                                         | Michael KOTZULLA (GER) |
| Secondary expert reviewer                        | Road Transport (1.A.3.b)                | Yvonne PANG (UK)       |
| Primary expert reviewer                          | Off -road mobile machinery (1.A.4.c ii) | Michael KOTZULLA (GER) |
| Secondary expert reviewer                        | Off -road mobile machinery (1.A.4.c ii) | Yvonne PANG (UK)       |
| Basic checks (Step 1 and 2)                      | N/A                                     | Katarina MARECKOVA     |
|                                                  |                                         | (CEIP)                 |

# **Executive Summary**

- 1. As mandated by Decision 2012/3 (ECE/EB.AIR/111/Add.1) of the Executive Body of the CLRTAP the nominated Expert Review Team undertook a detailed review of the adjustment application submitted by France. The review was undertaken on behalf of the EMEP Steering Body and following the guidance published in the Annex to decision 2012/12 (ECE/EB.AIR/113/Add.1).
- 2. Each sector of the application was reviewed by two independent sectoral experts during May and June 2014. The findings were discussed at the meeting held from 23-27 June 2014 in Copenhagen at the EEA. The conclusions and recommendations for the EMEP SB are documented in this country report.

**Table ES1 Summary Information on the Submitted Application** 

| Reasons for adjustment application (Decision 2012/3, para 6) | Non-road mobile Machinery 1.A.2.f ii: Different methodologies Road transport 1.A.3.bi-iv: Different methodologies, and significantly different EFs Non-road mobile Machinery 1.A.4.c ii: Different methodologies |
|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Pollutants for which adjustment is applied for               | NO <sub>x</sub>                                                                                                                                                                                                  |
| Year(s) for which adjustment is applied                      | 2010 - 2012                                                                                                                                                                                                      |
| Date of notification of adjustment to the Secretariat        | 10 February 2014                                                                                                                                                                                                 |

- 3. The Expert Review Team reviewed and evaluated the documents submitted by France.
- 4. **NOx from 1.A.3.bi-iv Road Transport:** The Expert Review Team concludes that the application will require additional information and review before a full assessment can be completed. During the review, the expert review team requested more detailed information from France in particular, information that allowed the impacts of revising EFs to be isolated from other developmental changes to the methodology. The Party indicated that they were able to provide such material.
- 5. Within the available resources and time constraints, the Expert Review Team has not been able to determine whether the basis for this application meets all of the requirements laid out in Decision 2012/12 of the Executive Body of the CLRTAP. The Expert Review Team therefore recommends that the EMEP Steering Body assign this adjustment application an OPEN status, and seeks to arrange for further work to be undertaken that will conclude whether the application should be accepted or rejected.
- 6. **Non-road Mobile Machinery 1.A.2.f.ii, 1.A.4.c:** The Expert Review Team concludes that the application regarding NOx from 1.A.2.f.ii and 1.A.4.c ii does not meet the requirements laid out in Decision 2012/12 of the Executive Body. From the information provided, the Expert Review Team concluded that the additional emissions that arise do not result from significant changes in methodologies but from the revision and re-allocation of activity data. The Expert Review Team therefore recommends that the EMEP Steering Body **REJECT** this adjustment application. More detailed explanations of this recommendation can be found in sections 2.2 and 2.4 of this report.

# **Content**

| 1  | In   | trod   | uction and Context                                                                 | 5  |
|----|------|--------|------------------------------------------------------------------------------------|----|
| Fi | gure | 1: Flo | ow Diagram/Decision Tree for the Review of Adjustment Applications                 | 6  |
| 2  | R    | evie   | w of Submitted Adjustments                                                         | 7  |
|    | 2.1  | Ass    | essment of formal criteria                                                         | 7  |
|    | 2.2  | Мо     | bile Combustion in Manufacturing Industries and Construction: 1.A.2.f (NOx)        | 7  |
|    | 2.2  | 2.1    | Assessment of Consistency with Requirements of Decision 2012/3                     | 7  |
|    | 2.2  | 2.2    | Assessment of the Quantification of the Impact of the Revision                     | 8  |
|    | 2.3  | Roa    | d Transport 1.A.3.b (NOx)                                                          | 8  |
|    | 2.3  | 3.1    | Assessment of consistency with requirements of decision 2012/3                     | 8  |
|    | 2.3  | 3.1    | Assessment of the Quantification of the Impact of the Revision                     | 9  |
|    | 2.4  | Agr    | iculture/Forestry/Fishing: Off-road vehicles and other machinery: 1.A.4.c ii (NOx) | 9  |
|    | 2.4  | 1.1    | Assessment of consistency with requirements of decision 2012/3                     | 9  |
|    | 2.4  | 1.2    | Assessment of the quantification of the impact of the revision                     | 9  |
| 3  | C    | oncl   | usions and Recommendations                                                         | 10 |
| 4  | ln   | forn   | nation Provided by the Party                                                       | 11 |
| 5  | R    | efere  | ences                                                                              | 12 |

#### 1 Introduction and Context

- 7. Parties may apply to adjust their inventory data or emission reduction commitments if they are (or expect to be) in non-compliance with their emission reduction targets<sup>1</sup>. However, in making an adjustment application, they must demonstrate that extraordinary circumstances have given rise to revisions to their emissions estimates. These extraordinary circumstances fall into three broad categories:
  - a) Emission source categories are identified that were not accounted for at the time when the emission reduction commitments were set; or
  - b) For a particular source, the emission factors used to estimate emissions for the year in which emissions reduction commitments are to be attained are significantly different to those used when the emission reduction commitments were set; or
  - c) The methodologies used for determining emissions from specific source categories have undergone significant changes between the time when emission reduction commitments were set and the year they are to be attained.
- 8. Any Party submitting an application for an adjustment to its inventory is required to notify the Convention Secretariat through the Executive Secretary by 15 February at the latest. The supporting information detailed in Decision 2012/12 must be provided (either as part of the Informative Inventory Report, or in a separate report) by 15 March of the same year.
- 9. As mandated by Decision 2012/12 of the Executive Body of the CLRTAP, applications for adjustments that are submitted by Parties are subject to an expert review<sup>2</sup>. Technical coordination and support to the review is provided by EMEP's Centre on Emission Inventories and Projections (CEIP). The members of the review team are selected from the available <u>review experts</u><sup>3</sup> that Parties have nominated to the CEIP roster of experts.
- 10. The Expert Review Team (ERT) undertakes a detailed technical review of the adjustment application in cooperation with the EMEP technical bodies and makes a recommendation to the EMEP Steering Body on the acceptance or rejection of the application. The EMEP Steering Body then takes its decision on any adjustment application based on the outcome of the technical assessment completed by ERT.
- 11. The flow diagram below outlines the different stages of the technical review. The following sections of this report are structured in the same way, and describe in detail the findings of the ERT at each of the decision gates in the process.

<sup>&</sup>lt;sup>1</sup> Throughout this report the term "emission reduction commitments" is used. However, the term "emission ceilings" is equally applicable.

<sup>&</sup>lt;sup>2</sup> The EMEP Steering Body, in conjunction with other appropriate technical bodies under EMEP, shall review the supporting documentation and assess whether the adjustment is consistent with the circumstances described in paragraph 6 of decision 2012/3 and the further guidance in decision 2012/12.

http://www.ceip.at/fileadmin/inhalte/emep/pdf/2014/0\_Roster\_2014.pdf

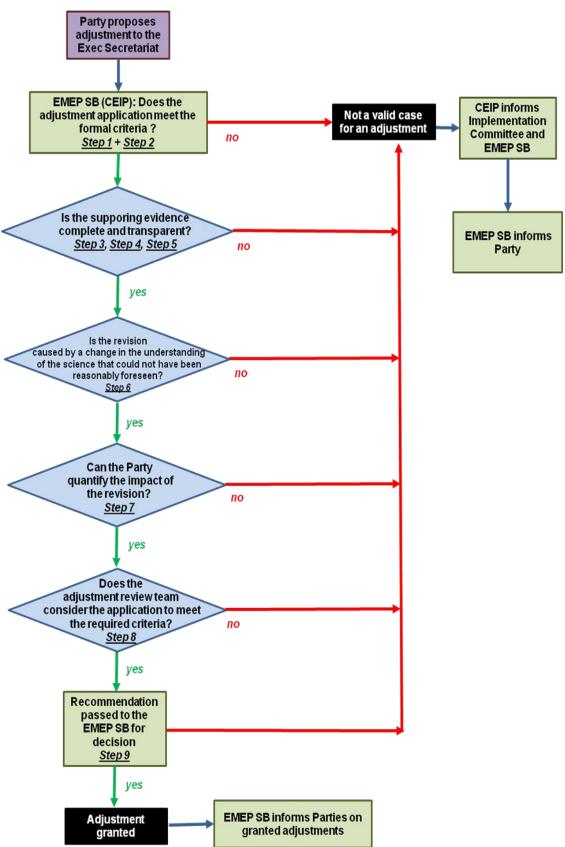


Figure 1: Flow Diagram/Decision Tree for the Review of Adjustment Applications

## **2** Review of Submitted Adjustments

#### 2.1 Assessment of formal criteria

- 12. France notified the Convention secretariat through the Executive Secretary of its intention to apply a new adjustment on 10/02/2014 and thus before the legal deadline of 15 February. All supportive information requested by decision 2012/12 was provided as part of the Informative Inventory Report on 14/03/2014 (in French). The English version of section 12.2 from France 2014 IIR report was delivered (voluntary) after the legal deadline of 15 March of the same year that it is being submitted for review by the EMEP Steering Body (decision 2012/12, annex, para 1). However the information was still used in the review. Section 4 lists the documentation provided by the Party. Additional documentation was provided on the request of the ERT.
- 13. France submitted an application for an adjustment of its NOx emission inventory in the sectors:
  - (a) Mobile Combustion in manufacturing industries and construction: (1.A.2.fii)
  - (b) Road transport (1.A.3.bi-iv)
  - (c) Agriculture/Forestry/Fishing: Off-road vehicles and other machinery (1.A.4.c ii)
- 14. France exceeds its emission reduction commitments listed in Annex II of the Gothenburg Protocol (paragraph 1 of decision 2012/3). France did not include any more specific information on when it will meet its emission ceiling for NOx in the supporting documentation. However, based on the projections provided with the 2014 NFR submission, France plans to meet its emission ceiling for NOx by 2015.
- 15. France provided evidence of to what extent the adjustment to its emission inventory reduces the exceedance and possibly brings the Party in compliance.

# 2.2 Mobile Combustion in Manufacturing Industries and Construction: 1.A.2.f (NOx)

#### 2.2.1 Assessment of Consistency with Requirements of Decision 2012/3

- 16. The Party made an application based on the use of different methodologies.
- 17. The adjustment application requires the provision of specific supporting information to demonstrate compliance with specific criteria (Decision 2012/3, para. 6a-c). The ERT reviewed the supporting documentation (see Section 4) with regard to these criteria and concluded that methodologies used for determining emissions from this specific source category have not undergone significant changes between the time when emission reduction commitments were set and the year they are to be attained. The ERT noted that the changes to the emissions are caused by the revision and reallocation of activity data.
- 18. The ERT therefore concludes that the provided supporting evidence does not comply with the criteria presented in Decision 2012/3.
- 19. The supporting information provided by the Party was considered by the ERT to be complete and transparent.

#### 2.2.2 Assessment of the Quantification of the Impact of the Revision

20. The adjustment application process requires that the Party submit a quantification of the impact of the adjustment for which an application has been submitted. Table 1 provides an overview of the NOx adjustment applications of France for 1.A.2.f.

Table 1 France's NOx Adjustment Application for Mobile Combustion in Manufacturing and Construction (1A2f)

| Reference<br>number | Pollutant       | NFR09     | unit | 2010   | 2011   | 2012   |
|---------------------|-----------------|-----------|------|--------|--------|--------|
| FRA/2014/1a         | NO <sub>x</sub> | 1.A.2.fii | kt   | -13.97 | -12.33 | -11.11 |

21. The ERT were not able to check the quantification of the impact of this adjustment, because no activity data were provided by the Party.

#### 2.3 Road Transport 1.A.3.b (NOx)

#### 2.3.1 Assessment of consistency with requirements of decision 2012/3

- 22. The Party made an application based on significant revisions to emission factors (EFs) and methodology.
- 23. The adjustment application requires the provision of specific supporting information to demonstrate compliance with specific criteria (Decision 2012/3, para. 6a-c). The ERT reviewed the supporting documentation (see Section 4) with regard to these criteria and concluded that EFs used to determine emission levels for the road transport source categories 1.A.3.b for the year in which emissions reduction commitments are to be attained are significantly different than the emission factors applied to these categories when emission reduction commitments were set.
- 24. The changes in EFs highlighted in the adjustment application could not have been foreseen at the time of setting 2010 emission ceilings, and result entirely from the Euro standards not delivering the originally predicted emissions reductions in the real world.
- 25. The ERT therefore concludes that the provided supporting evidence does comply with the criteria presented in Decision 2012/3, and that the circumstances on which the adjustment is based could not have been reasonably foreseen by the Party when the emission ceilings were established for 2010.
- 26. The ERT reviewed the documentation that was provided to support the application (listed in Section 4).
- 27. The supporting information provided by the Party on the calculation methods, emission factors and associated revisions was considered to be rather incomplete and not transparent. The ERT therefore contacted the Party to request clarification on the following points:
  - A quantified assessment of other effects likely to impact on the 2010 emissions (since the time the ceilings were set);
  - Separation of changes to allow a quantitative assessment of the changes to the EFs due to the development of the models (COPERT II > III > 4) only. Therefore, also the quantification of other changes (e.g. changes to AD).

28. France provided a brief discussion paper on these issues (see Section 4, Table 6) but no detailed and transparent clarifications to the questions asked by the ERT. The ERT concluded that the lack of a comparison between previous and current versions of the AD used in the current and previous versions of the inventory means that it is not possible to isolate the impact on the resulting emissions of only the revisions of the EFs.

#### 2.3.1 Assessment of the Quantification of the Impact of the Revision

29. The adjustment application process requires that the Party submit a quantification of the impact of the adjustment for which an application has been submitted. Table 2 provides an overview of the NOx adjustment applications of France in the Road Transport sector.

Table 2: France's NOx Adjustment Applications for Road Transport (1A3b)

| Reference number | Pollutant       | NFR09   | unit | 2010    | 2011    | 2012    |
|------------------|-----------------|---------|------|---------|---------|---------|
| FRA/2014/2a      | NO <sub>x</sub> | 1.A.3.b | kt   | -146.73 | -144.69 | -129.46 |

30. The ERT were not able to review the calculation that quantified the impact of this adjustment because the Party did not provide enough underlying data in the supporting documentation.

# 2.4 Agriculture/Forestry/Fishing: Off-road vehicles and other machinery: 1.A.4.c ii (NOx)

#### 2.4.1 Assessment of consistency with requirements of decision 2012/3

- 31. The Party made an application based on the use of different methodologies.
- 32. The adjustment application requires the provision of specific supporting information to demonstrate compliance with specific criteria (Decision 2012/3, para. 6a-c). The ERT reviewed the supporting documentation (see Section 4) with regard to these criteria and concluded that methodologies used for determining emissions from this specific source category have not undergone significant changes between the time when emission reduction commitments were set and the year they are to be attained. The ERT noted that the changes to the emissions are caused by the revision and reallocation of activity data.
- 33. The ERT therefore concludes that the provided supporting evidence does not comply with the criteria presented in Decision 2012/3.
- 34. The supporting information provided by the Party was considered by the ERT to be complete and transparent.

#### 2.4.2 Assessment of the quantification of the impact of the revision

35. The adjustment application process requires that the Party submit a quantification of the impact of the adjustment for which an application has been submitted. Table 3 provides an overview of the NOx adjustment applications of France for 1.A.2.f.

Table 3 France's NOx Adjustment Application for Mobile Combustion in Agriculture, Forestry and Fishing (1A4cii)

| Reference<br>number | Pollutant | NFR09      | unit | 2010   | 2011   | 2012   |
|---------------------|-----------|------------|------|--------|--------|--------|
| FRA/2014/3a         | NOx       | 1.A.4.c ii | kt   | -30.41 | -27.93 | -25.65 |

36. The ERT were not able to check the quantification of the impact of this adjustment, because the Party did not provide enough underlying data in the supporting documentation..

#### 3 Conclusions and Recommendations

- 37. The expert review team (ERT) has undertaken a full and thorough assessment of the application for an adjustment of NOx emissions inventory that was submitted by France for the following source categories:
  - a. Mobile Combustion in manufacturing industries and construction 1.A.2.f
  - b. Road transport 1.A.3.b
  - c. Agriculture/Forestry/Fishing: Off-road vehicles and other machinery 1.A.4.c ii
- 38. The review of the submitted application followed the guidance provided in the Annex to Decision 2012/12 of the Executive Body of the CLRTAP. The findings of the ERT are described in detail in Section 7 of this report.
- 39. Table 4 below provides a summary of the adjustment applications received from France, and the subsequent recommendations made by the ERT to the EMEP SB.

Table 4: Recommendations from the ERT to the EMEP SB

| Country | Sector                                       | NFRs           | Pollutant | Years       | ERT<br>Recommendation |
|---------|----------------------------------------------|----------------|-----------|-------------|-----------------------|
| France  | Road Transport                               | 1A3bi - iv     | NOx       | 2010 - 2012 | Open status*          |
| France  | Non-road and<br>Off-road mobile<br>machinery | 1A2fii, 1A4cii | NOx       | 2010 - 2012 | Reject                |

- \*- Within the available resources and time constraints, the ERT has not been able to determine whether this adjustment application meets all of the requirements included in Decision 2012/12 of the EB of the CLRTAP. The ERT therefore recommends that the EMEP SB assign such adjustment application an "OPEN" status, and seeks to arrange for further work to be undertaken to conclude whether the application should be accepted or rejected.
- 40. **Road Transport (1.A.3.b i iv), NOx:** France provided information to support their application for an adjustment. During the review, the ERT requested more detailed information from France– in particular, information that allowed the impacts of revising EFs to be isolated from other developmental changes to the methodology. The Party indicated that they were able to provide such

material, however, the resources available to the ERT did not allow the review of this additional detailed material to be completed within the assessment timescales. The ERT therefore recommends that EMEP Steering Body assigns the status of this adjustment application as "OPEN" until the assessment can be completed.

41. **Non-road Mobile Machinery 1.A.2.f.ii & 1.A.4.c:** The ERT concludes that the application regarding NOx from 1.A.2.f.ii and 1.A.4.c ii does not meet the requirements laid out in Decision 2012/12 of the Executive Body. The ERT found that the application for an adjustment of Party's emissions inventory does not meet all requirements included in the EB Decisions 2012/3 and 2012/12, in particular the additional emissions do not result from significant changes in methodologies but from the revision and re-allocation of activity data. The ERT therefore recommends that the EMEP Steering Body **REJECT** this adjustment application.

## **4 Information Provided by the Party**

42. Table 5 lists the information provided by the Party in its adjustment application. The information provided by Party can be downloaded from the CEIP website<sup>4</sup>.

Table 5: Information provided by the Party (as part of the application process)

| Filename                                              | Short description of content                                                                                                               |
|-------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Annex_VII_Adjustments_summary_template_extended2.xlsx | MS Ecxel file with detailed data underlying the proposed adjustment applications for NOx from (a) 1.A.2.f, (b) 1.A.3.b, and (c) 1.A.4.c ii |
| IIR_FR_section 12.2 NOx adjustment_May2014.pdf        | Description of proposed adjustments (in English)                                                                                           |
| UNECE_mars2014.pdf                                    | unassessed file (French only)                                                                                                              |

The ERT found it necessary to ask the Party for minor points of clarification. The information provided is described in Table 6 below.

Table 6: Additional information provided by the Party

| Short description of content                      |
|---------------------------------------------------|
| Additional discussion regarding the consideration |
| of other effects besides changes in EF.           |
|                                                   |

\_

<sup>4</sup> http://www.ceip.at/ms/ceip home1/ceip home/adjustments gp/

### **5** References

Decision 2012/3 (ECE/EB.AIR/111/Add.1): Adjustments under the Gothenburg Protocol to emission reduction commitments or to inventories for the purposes of comparing total national emissions with them

Decision 2012/12 (ECE/EB.AIR/113/Add.1): Guidance for adjustments under the 1999 Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to emission reduction commitments or to inventories for the purposes of comparing total national emissions with them

Data submitted by Parties applying for an adjustment: <a href="http://www.ceip.at/ms/ceip">http://www.ceip.at/ms/ceip</a> home1/ceip home/adjustments gp/

EMEP/EEA Air Pollutant Emission Inventory Guidebook 2013 http://www.eea.europa.eu/publications/emep-eea-guidebook-2013

2009 Reporting Guidelines (ECE/EB.AIR/97) for Estimating and Reporting Emission Data under CLRTAP

The 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone <a href="http://www.unece.org/env/lrtap/multi-h1.html">http://www.unece.org/env/lrtap/multi-h1.html</a>