



EUROPEAN COMMISSION

DIRECTORATE-GENERAL

CLIMATE ACTION

Directorate C – Climate Strategy, Governance and Emissions from non-trading sectors

Unit C.2 – Governance and Effort Sharing

User Manual

The Monitoring and Reporting Regulation – Improvement Report Template

16 December 2016

This document is part of the suite of guidance documents provided by the Commission services for supporting the implementation of Commission Regulation (EU) No. 601/2012 on the monitoring and reporting of greenhouse gas emissions and Commission Regulation (EU) 600/2012 on the verification of greenhouse gas emission reports and tonne-kilometre reports and the accreditation of verifiers pursuant to Directive 2003/87/EC of the European Parliament and of the Council¹ of 21 June 2012.

The guidance represents the views of the Commission services at the time of publication. It is not legally binding.

All guidance documents and templates can be downloaded from the Commission's website at the following address: http://ec.europa.eu/clima/policies/ets/monitoring/documentation_en.htm.

¹ <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02012R0601-20140730&qid=1480592359932&from=DE>



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1 INTRODUCTION

This document provides further guidance for the completion of the Commission's improvement report (IR) template for stationary installations published on DG CLIMA's website²:

http://ec.europa.eu/clima/policies/ets/monitoring/documentation_en.htm

The IR template itself already contains extensive guidance for the operator. The term guidance here is to be understood not only as guidance text but also as guidance tools such as conditional formatting and automatic display of the relevant sections depending on entries made in previous sections.

The aim of this document is therefore not to duplicate the guidance provided in the IR template. Instead, it should support the guidance with specific examples and screenshots related to how the sections in the template should be completed for different types of installations, monitoring methodologies, source streams, etc.

Please note that Member States may have published Member State-specific versions of the IR template for operators to use. Besides translation of the guidance text these templates may also deviate in other sections from the Commission's template. However, in most cases the differences should not be significant. Therefore, most of the guidance provided in this document should also be applicable for the IR template in Member States that are using a template base on the Commission's. It should be noted though, that the IR template may be of a completely different design in Member States that are using their own dedicated IT system for EU ETS reporting purposes. In those cases this document may still prove useful. Nevertheless please use any guidance provided by the Member State as the starting point for completing the IR.

² http://ec.europa.eu/clima/policies/ets/monitoring/documentation_en.htm

2 GUIDANCE FOR THE IR TEMPLATE

2.1 Sheet a: Contents

This sheet contains a table of contents with hyperlinks to the sheets and sections of the IR template. In addition, it displays the name of the operator and the installation as well as the unique ID. Furthermore, the version number of the template is displayed, including the following information:

- Template provided by: This is either the European Commission or the name of the Member State in case a Member State-specific version has been published
- Publication date: This is usually a reference date of e.g. endorsement, publication, etc. This allows checking whether the latest version is being used.
- Language version: This indicates the language used in the template
- Reference filename: This is a generic filename consisting of the following parts 1) “P3 Improvement_” 2) who the template is provided by (see above, e.g. “COM” for Commission), 3) the language (e.g. “en” for English) and 4) the publication date above.

Improvement Report

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Information about this file:

This improvement report was submitted by:

Installation name:

Unique installation identifier:

If your competent authority requires you to hand in a signed paper copy of the improvement report, please use the space below for signature:

Date (of submission of this
Improvement Report to the
Competent Authority)

Name and Signature of legally responsible person

Template version information:

Template provided by:	European Commission
Publication date:	30.11.2016
Language version:	English
Reference filename:	P3 Improvement_COM_en_301116.xls

2.2 Sheet b: General guidelines and conditions



Please carefully read the guidance provided on this page of the IR template before you proceed. It contains all the relevant background information on the template including guidance on how the template functions (e.g. colour coding and which Excel functions to be used).

2.3 Sheet A: Operator & installation identification



Before completing this section in the template, please carefully read the guidance at the top of the sheet in the template. For the examples below, further guidance is provided on some specific points.

This sheet requires entry of general information related to the report, the operator and installation. This is the sheet where Member States usually make the biggest changes compared to the IR template provided by the Commission to accommodate further reporting requirements related to administrative information (e.g. further IDs, information on legal entity etc.). This sheet comprises the following sections:

- Installation category and whether it is an installation of low emissions?
- When has the last improvement report been submitted? Together with the information from the point above the date until the next improvement report in accordance with Article 69(1) is due will be displayed.
- Contact details
- Verifier details

1 Information about the improvement report

IMPORTANT! Improvements reported here do not automatically update the monitoring plan. Whenever improvements require modifications of the monitoring plan (see Article 15 of the MRR), a revised monitoring plan must be submitted to the CA via the normal route according to administrative practice, subject to the CA's approval.

1 General Info about the installation:

i. Installation category:

This information here impacts on the tiers that an installation is required to achieve and to the frequency that installations need to submit improvement reports in accordance with Article 69(1).

ii. Installation with low emissions?

Installations with low emissions (i.e. installations with < 25,000 t CO₂e per year) need to submit improvement reports only in response to verifiers findings of non-conformities and misstatement (Article 47(3)) AND to submit improvement reports in accordance with Article 69(1-3).

2 Information about the improvement report in accordance with Article 69(1) of the MRR:

Depending on your installation category and the year you have submitted the last improvement report a new improvement report pursuant to Article 69(1) MRR might not be due until this year. In such a case it is not necessary to enter further data in this improvement report template.

i. When has the last improvement report been submitted?

Please enter here the date when the last improvement in accordance with Article 69(1) has been submitted.

ii. The next Article 69(1) improvement report is due:

Based on your entries above, the date until your next improvement report in accordance with Article 69(1) is due will be displayed. This date is included to assist operator and CA to identify the next potential date for submission. If the installation is operating at the highest tier and does not apply fall-back approaches, then of course there is no need to submit improvement reports in accordance with Article 69(1).

Please note that your CA may set an alternative date, but no later than 30 September of the same year. For further information please contact your CA.

2.4 Sheet B: Improvement description



Before completing this section in the template, please carefully read the guidance at the top of the sheet in the template. For the examples below, further guidance is provided on some specific points.

2.4.1 Section B.6: Types of improvements

In this section the operator has to select all the relevant reasons for why this improvement report needs to be submitted. By choosing “TRUE” or “FALSE” from the drop-down list, all relevant sections of the template are displayed and those sections are indicated as either “relevant” or “not relevant” throughout the template. In addition, sections not being relevant are greyed out.

1 Reporting of improvements related to non-conformities and recommendations in accordance with Article 69(4) MRR

i. Does the verification report state non-conformities?	TRUE	Relevant sections: C_VerRepNonConformities (section 8)
Non-conformities (verification report)	<i>Where the verification report established in accordance with Regulation (EU) No 600/2012 states any non-conformities, the operator shall submit to the competent authority an improvement report for approval. This report has to be submitted by 30 June of the year in which that verification report is issued by the verifier.</i>	
i. Does the verification report contain recommendations for improvements?	TRUE	Relevant sections: D_VerRepImprovements (section 9)
Recommendations (verification report)	<i>Where the verification report established in accordance with Regulation (EU) No 600/2012 states recommendations for improvements (pursuant to Article 30(1) of that Regulation), the operator shall submit to the competent authority an improvement report for approval. This report has to be submitted by 30 June of the year in which that verification report is issued by the verifier.</i>	
	<i>Installations with low emissions (i.e. installations with < 25,000 t CO₂e per year) are exempted from the requirement to submit improvement reports in response to verifier's recommendations for improvements (Article 47(3)). Please note that this does not exempt installations with low emissions from considering verifiers' recommendations: a verifier is required to check whether an operator has implemented recommendations the following year and to assess the risk of misstatements and non-conformities (Article 30(2) of Regulation (EU) No 600/2012).</i>	

2 Reporting of improvements in accordance with Article 69(1) MRR

ii. Do you have to report improvements related to specific source streams?	TRUE	Relevant sections: 7(1), E_SourceStreams (section 10)
Improvements (source streams)	<i>Improvements related to source streams. Reporting here is:</i>	
	- mandatory, if not at least the tiers required pursuant to the first sub-paragraph of Article 26(1) of the MRR are applied for activity data or for any calculation factor.	
	- optional, if the improvements are related to the quality of data with no direct impact on tiers, e.g. increased frequency of analyses.	
iii. Do you have to report improvements related to GHG measurements?	TRUE	Relevant sections: 7(2), F_MeasurementBasedApproaches (section 11)
Improvements (GHG measurements)	<i>Improvements related to emission sources (measurement points for continuous measurements of CO₂, N₂O and CO₂ transfer). Reporting here is:</i>	
	- mandatory, if not at least the tiers required pursuant to the Article 41(1) of the MRR are applied for any measurement point.	
	- optional, if improvements related to quality of data but with no direct impact on tiers, e.g. measures mitigating data gaps.	
iv. Are you applying a fall-back approach?	TRUE	Relevant sections: G_Fall-backApproach (section 12)
Improvements (fall-back)	<i>Improvements related to any fall-back methodology that is applied if not at least tier 1 could be reached. This is relevant if you are applying any fall-back methodologies.</i>	

2.4.2 Section B.7: Source streams and emission sources

Here the operator has to list all source streams and emission sources for which:

- not at least the tiers required pursuant to the first sub-paragraph of Article 26(1) are applied for activity data or for any calculation factor, or
- not at least the tiers required pursuant to Article 41(1) of the MRR are applied for any measurement point, or
- optionally, if improvements are related to quality of data but with no direct impact on tiers, e.g. measures mitigating data gaps.

For source streams and emission sources that do meet the required tiers, it is not necessary to enter information here.

The screenshot below shows an example of a list of source streams:

ID	Source stream type	Source stream name	Category	Error?
F3	Combustion: Other gaseous & liquid fuels	Natural gas	Major	
F6	Combustion: Solid fuels	Coal	Major	
F8	Ceramics: Carbon inputs (Method A)	Clay	Minor	

The screenshot below shows an example of a list of emission sources:

ID	Measurement point description	GHG measured	Category	Error?
M3	Nitric acid stack of line B	N2O	Major	
M5	Transfer to installation ABC123	CO2 transfer	Major	

2.5 Sheet C: Verification report – non-conformities



Before completing this section in the template, please carefully read the guidance at the top of the sheet in the template. For the examples below, further guidance is provided on some specific points.

This section is relevant if the verifier stated outstanding non-conformities in the latest verification report, i.e. “TRUE” has been selected for the question “Does the verification report state non-conformities?” in sheet B, section 6 (see section 3.4.1 above). The following screenshot shows an example of how this section could be completed. In this example it is assumed that following the statement in the verification report issued in March 2016 (on the annual emission report covering the 2015 emissions) the operator has taken and implemented measures on 20 May of the same year to restore conformity with the approved monitoring plan.

1	i. Measures will be/have been taken:	TRUE	When? 20.05.2016
	ii. Description:		
	<i>In case you require more space for the description you may also use external files and reference those here.</i>		
	Title: VR report issue #1: internal and external audits		
	Description: The verifier identified the following non-material non-conformity: <i>"The internal and external audits to ensure regular internal reviews regarding the implementation of the MP procedures and validation of data are not carried out as described in the approved MP. Furthermore the scope of the audits does not totally cover the ETS scope. This non-conformity has no known impact on the stated emission data in the emissions report."</i> This non-conformity occurred because of a change of staff members. We have failed to ensure that new staff received all relevant training in time. The existing procedure on training new staff members has been updated (see attached updated MP) which will ensure that the correct functioning of auditing procedures will be re-established.		

2.6 Sheet D: Verification report – recommendations for improvement



Before completing this section in the template, please carefully read the guidance at the top of the sheet in the template. For the examples below, further guidance is provided on some specific points.

This section is relevant if the verifier stated recommendation for improvement in the latest verification report, i.e. “TRUE” has been selected for the question “Does the verification report contain recommendations for improvements?” in sheet B, section 6 (see section 3.4.1 above). The following screen-

shot shows an example of how this section could be completed. In this example it is assumed that following the recommendation in the verification report issued in March 2016 (on the annual emission report covering the 2015 emissions) the operator will not be able to improve to the use of higher tiers due to the incurrence of unreasonable costs.

1	i. Measures will be/have been taken:	FALSE	When?	
		If measures will not be taken, why not? Unreasonable costs		
	ii. Description:			
	<i>In case you require more space for the description you may also use external files and reference those here.</i>			
	Title:	VR recommendation #1: Higher tier for EF natural gas		
	Description:	<p>The verifier identified the following recommendation for improvement: <i>"During the verification evidence points to the possibility for the installation to meet a higher tier. Therefore the operator is recommended to explore the use of the highest tier (tier 3) for the analysis of the emission factor of natural gas, or obtain agreement from the CA that this is not required. At the moment tier 2 is applied, however new technical developments should enable the operator to meet the higher tier."</i></p> <p>We explored options for improvement by obtaining offers from three different suppliers of online gas analysers. As shown in the attached file (cost analysis online gas analysers 2016), application of tier 3 would still lead to unreasonable costs.</p>		

2.7 Sheet E: Source streams



Before completing this section in the template, please carefully read the guidance at the top of the sheet in the template. For the examples below, further guidance is provided on some specific points.

This section is relevant if there are source streams for which:

- not at least the tiers required pursuant to the first sub-paragraph of Article 26(1) are applied for activity data or for any calculation factor, or
- optionally, if improvements are related to quality of data but with no direct impact on tiers, e.g. measures mitigating data gaps.

Therefore, this section is relevant if "TRUE" has been selected for the question "Do you have to report improvements related to specific source streams?" in sheet B, section 6 (see section 3.4.1 above).

The following screenshot shows an example of how this section could be completed. In this example it is assumed that the operator is not applying the required highest tier for the activity data of natural gas, i.e. tier 4. In the past this was justified by the incurrence of unreasonable cost related to the shutdown that would be required to install new equipment. However, during the major maintenance shutdown in April 2016 the shutdown costs were no longer additional and therefore could not be taken into account for the assessment of unreasonable costs. Therefore, during the shutdown a new measuring instrument has been installed that achieves tier 4.

1

F3. Natural gas	Combustion
Combustion: Other gaseous & liquid fuels	Major

Detailed instructions for data entries in this tool can be found at the top of this sheet.

Activity Data or Calc.		Reason for deviation in the past:	Impact on tiers?	Measures taken:	When?	Tier applied:	
Factor:	Tier required:						
i. Activity Data	4	Unreasonable costs	TRUE	TRUE	15.04.2016	4	± 1,5%
ii.							
iii.							

vi. **Description**

In case you require more space for the description you may also use external files and reference those here.

New equipment has been installed on 15 April 2016 which achieves an uncertainty <1.5% (tier 4). Please see updated MP attached.

2.8 Sheet F: Measurement-based approaches



Before completing this section in the template, please carefully read the guidance at the top of the sheet in the template. For the examples below, further guidance is provided on some specific points.

This section is relevant if there are source streams for which:

- not at least the tiers required pursuant to Article 41(1) are applied for activity data or for any calculation factor, or
- optionally, if improvements are related to quality of data but with no direct impact on tiers, e.g. measures mitigating data gaps.

Therefore, this section is relevant if “TRUE” has been selected for the question “Do you have to report improvements related to GHG measurements?” in sheet B, section 6 (see section 3.4.1 above).

The following screenshot shows an example of how this section could be completed. In this example it is assumed that the operator is not applying the required highest tier for measuring N2O emissions from the nitric acid production line. A recent survey of potential CEMS suppliers has however shown that, given the installation configuration and flue gas flow characteristics, there is still no CEMS on the market the allows to achieve tier 4. Note that, alternatively, the operator may also have argued here that achieving tier 4 would incur unreasonable costs because it is technically possible to replace the whole production line by new one for which the CEMS on the market would allow achieving tier 4.

1	M3. Nitric acid stack of line B					
					N2O	Major
Detailed instructions for data entries in this tool can be found at the top of this sheet.						
	Tier required:	Reason for deviation in the past:	Impact on tiers?	Measures taken:	When?	Tier applied:
i.	3	Technically infeasible	TRUE	FALSE		
ii.	Description					
	<i>In case you require more space for the description you may also use external files and reference those here.</i>					
	A supplier survey has shown that there are still no measuring instruments available on the market that would allow the achievement of the required highest tier for this stack and emission patterns. Achieving tier 3 is therefore currently still technically not feasible.					

2.9 Sheet G: Fall-back approaches



Before completing this section in the template, please carefully read the guidance at the top of the sheet in the template. For the examples below, further guidance is provided on some specific points.

This section is relevant if the operator applies a fall-back methodology, i.e. “TRUE” has been selected for the question “Are you applying a fall-back approach?” in sheet B, section 6 (see section 3.4.1 above). The following screenshot shows an example of how this section could be completed. In this example it is assumed that the operator is applying a fall back approach for the determination of the activity data of one source stream. In February 2017 this will be fixed by installing a flow measurement instrument which allows to comply with tier 4.

Improvement measures will be taken:	TRUE	When?	15.02.2017
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If improvement measures will be taken, please describe here what kind of measures those are, the timeline of their implementation and how you have determined that they will lead to an improvement.

If improvement measures will be taken without direct impact on tiers, i.e. tier 1 will still not be reached, but those measures improve the reliability of data used for the fall-back approach or are making data less prone to inherent or control risk, please describe here what kind of measures those are, the timeline of their implementation and how you have determined that they will lead to an improvement.

If improvement measures will not be taken, please describe here why they are still technically not feasible or why they would incur unreasonable costs to apply at least tier 1.

In case you require more space for the description you may also use external files and reference those here.

During the two-week maintenance shutdown early next year, a flow measurement instrument will be installed that complies with EN ISO 123456. This instrument will allow us to reach tier 4 for the activity data of source stream XY for which a fall-back approach is currently applied. Further details can be found in the updated monitoring plan (see attachment) and the accompanying explanatory note

2.1 Sheet H: Additional information

In this section the operator may provide additional information related to definitions, abbreviations, comments, or reference to further documents provided accompanying the improvement report.

2.1 Sheet I: Accounting

This sheet contains an overview of the important parameters for each source stream, emission source and fall-back approach. The main purpose of this sheet is to allow checking for completeness and consistency and to extract data for e.g. transfer into a database.

General information

#	Unique ID of the installation:	Operator Name:	Installation name:	Competent Authority for reporting	Title:	First Name	Surname:	Job title:	Organisation name (if different from the operator):	Telephone:	Email:	Installation category:	on v
1	XYZ123	Test Operator	Test Installation	Local Authority	-	Contact	Person	EU ETS mana		555-CLEANAIR	contact.person	B	