

CDM-EB79-AA-A15

Concept note

General simplification in the validation process - Delay in validation of monitoring plan (3/CMP.9 – Paragraph 10)

Version 01.0



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1. Procedural background

1. At its ninth session, the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (hereinafter referred to as the CMP) adopted **decision 3/CMP.9**, “Guidance relating to the clean development mechanism”. Paragraph 10 of this decision “Requests the Executive Board to analyse allowing the validation of monitoring plans for small-scale and microscale project activities and programmes of activities before their first verifications.”
2. **CDM Modalities and procedures:** The designated operational entity selected by project participants to validate a project activity, being under a contractual arrangement with them, shall review the project design document and any supporting documentation to confirm that the following requirements have been met:
 - (a) Provisions for monitoring, verification and reporting are in accordance with decision 17/CP.7, the present annex and relevant decisions of the COP/MOP.
3. The requirements for monitoring of small scale project activities detailed in CDM Modalities and Procedures (FCCC/CP/2002/7/Add.3) and other existing regulatory documents approved by the board are as annexed as background information in Annex I.

2. Purpose

4. The purpose of this concept note is to assess different scenarios to allow the validation of monitoring plans for small-scale and microscale project activities and programmes of activities before their first verifications. It also assesses the implications (e.g. costs) for the different stakeholders (project participants, DOEs, DNAs and the secretariat) of these different scenarios.

3. Key issues and proposed solutions

5. The validation of the monitoring plan is part of the CDM validation done by a designated operational entity (DOE) and this takes place before the registration of a CDM project activity.
6. If there are permanent changes to the monitoring plan as described in the registered PDD, a request for approval of changes may be submitted by a DOE before the first verification.
7. The following three scenarios are derived that would comply with the request made by paragraph 10 of the decision 3/CMP9:
 - (a) To validate the monitoring plan during the validation of a project activity (i.e. business as usual scenario). The monitoring plan is a document which is designed during the development of a project's PDD, prior to registration. The plan specifies the variables that must be monitored, the frequency of monitoring, and the manner of quality control;
 - (b) To validate the compliance of the monitoring parameters and means with the approved methodology and the applicable tool(s) (e.g. Identify the list of

parameters required by the selected approved methodology including applicable tool(s) by means of document review); and detailing the monitoring plan on how, where, by whom and by what means prior to or at verification stage;

- (c) To validate the “complete monitoring plan” at a time in between the stage of validation and its first verification of a project activity or during the first verification. The term complete monitoring plan here in means that all details in section B.7 of the PDD is left blank at validation stage.
8. Scenario (A), continuing with the BAU scenario – Several challenges have been identified by different stakeholders (e.g. the World bank in their publication “10 years of experience in carbon finance”) related to this BAU scenario:
- (a) In many projects, the personnel assisting with project registration, and therefore the personnel with knowledge of the CDM and its procedures, are different from those who have responsibilities for implementing the project and the monitoring plan, hence personnel with responsibilities for collecting key process parameters with the precision and frequency expected from the monitoring plan are not properly trained;
 - (b) The typical reasons for the regulator’s intervention, in terms of verification correction and/or review, appear to reflect, in part, the lack of awareness about the importance of following the monitoring plan to the letter, which can cause the need of post registration changes (PRC) that can lead to one of three scenarios: (i) CERs are issued in the requested amount; (ii) a correction in the volume of emission reduction may be applied; or (iii) in the worst case scenario, the issuance may be rejected altogether;
 - (c) Based on the analysis of 50% of the projects that requested PRC (205 of 410) 36% are small scale projects. Out of the small scale projects, 59% projects requested the PRC due to reasons in appendix 1 (see paragraph **Error! Reference source not found.**). From the 41% not included in appendix 1 the following reasons can be seen:
 - (i) Change in the sampling procedure (e.g. in PDD sampling mentioned 95% confidence interval and it was actually 90% confidence interval);
 - (ii) Change in the location of meters (e.g. in the PDD, meter was mentioned at a substation, and in the actual implementation it was at the project site);
 - (iii) Change in monitoring parameters (e.g. two new monitoring parameters were added);
 - (iv) Sharing of one project activity meters with other CDM project activity;
 - (v) Later version of monitoring methodology being more objective than the version applied at registration;¹
 - (vi) Archival of data electronic vs paper file;

¹ The Board has allowed project participants to use the later version of the methodology if they are used in totality and changes will not be less conservative.

- (vii) Equal treatment to parameters that contribute to the emission reductions and not; i.e. many monitoring plans include parameters to just cross-check with emission estimates and emission estimates are endorsed by third party (e.g. monitoring of biomass in small scale electricity generation facility);
- (viii) Estimation of calorific values, calibration internal vs external;
- (ix) Changes in measurement methods but with same results (e.g. loss of biogas in pipeline).

9. Advantages and disadvantages of the scenario (A):

- (a) An advantage of retaining the existing practice i.e. validating the whole monitoring plan at the time of the validation provides a larger certainty for the project developers. If they are followed 100% as what is written (straight jacketed manner), then the potential for being requested for review or rejection at verification reduces significantly; the number of site visits that may be required will remain unchanged; however in contrary the on-ground practical experience shows that the real crux of the issue is to adhere 100% to what is written in the monitoring plan at practice due to various reasons listed above;
- (b) In most cases during the validation process, to register a project without any hiccups (request for review), the project developer and validating DOE would add as much as details in the monitoring plans and QA/QC procedures possible without leaving even tooth comb space for flexibility or even thinking through much of the practicality of implementing what is stated;
- (c) Over time the CDM-EB has provided flexibility to deviate from registered monitoring plan without any pre-approval by developing Appendix I in the project standards (paragraph 13 in this note), however it has not still solved all the issues in monitoring as seen from the statistics in paragraph 8 of this note;
- (d) The solutions provided in the project standard Appendix 1, for permanent changes reduces (a) potential CER generation since the adjustment to be done for the whole crediting period just because it is stated in the monitoring plan; (b) permanent changes are allowed for only equipment's that are in control of the project participants, but in most energy generation projects (constitute more than 60 % of the CDM portfolio) the monitoring equipment is within the control of the third party (grid agency).

10. Scenario (B) will decrease the time and costs needed for the post registration changes while being still in line with the small scale CDM modalities and procedures. Advantages and Dis- advantages of the scenario (B) are as below:

- (a) The project developer: (a) will not have certainty of their issuance until the new monitoring plan is approved by the board, and (b) if the request for approval of the monitoring plan is submitted after the implementation of the project, it may become difficult to change if the Board disallows a method by which monitoring is undertaken and (c) if the scenario does not allow verification at the time of the issuance, then additional site visit by DOE may increase the cost;

- (b) A change in BAU, but allowing to list the parameters required by the selected methodology and/or tools at validation and describing the plan that contains means of measuring a parameter at a later stage to at verification eliminates many of the identified issues specified above in paragraph 8 (c);
 - (c) The change allows the project participant to align the monitoring plan with the implemented practice; reduces the potential to seek post registration changes;
 - (d) The implementation of scenario B allows the project proponents to have certainty on the list of parameters and means to be monitored upfront and will reduce the risks at verification stage;
 - (e) The step of conducting the validation of complete monitoring plan at validation or later can be provided as an choice to the PP.A precedence is available in the existing CDM rules to allow validation of a specific baseline parameter during verification (ex: In N₂O methodologies, the baseline campaign can be validated either by the validation DOE or by a Verification DOE); the validation and verification of the small scale project activity can be conducted by the same DOE. Therefore the validation DOE can make a statement that the parameter's as required by the methodology are validated and implementation plan of the parameters be validated by verification DOE;
 - (f) Allowing to implement this scenario can be done in two work streams (a) Revision of appendix 1: Changes that do not require prior approval by the board of the "Clean development mechanism project standard", to include the above nine changes identified in Para 8 (c) that may not require prior approval by the board, taking into account an analysis on deviation and post registration changes requests received; and (b) Revise the regulatory document to allow the validation of monitoring plan prior or at verification after detailing the parameter's in the methodology at validation stage;
 - (g) The proposed scenario (B) as meets the requirements for monitoring plans for SSC under 32 (a) to (c) 4/CMP.1 and no change of CMP decision will be required.
11. Scenario (C) As per the current requirement in the CDM M&P, the validation of monitoring plan shall be undertaken by the validating DOE at the validation stage and therefore eliminating the validation of complete monitoring plan at the registration will require a change in the CDM M&P for all the three scales of projects (large, small and micro). Apart from the above deviation from M&P requirements, allowing the validation of monitoring plan prior to the first verification will induce additional step in the registration process and may induce additional site visit, which increase the transaction cost. In contrary it may also be allowed to conduct the validation of complete monitoring plan at the first verification of the project, which would mitigate the said increased transaction cost and even if there are flaws in the monitoring plan at this stage, the project proponent could always come back after correction.

4. Impacts

12. If scenario (B) is chosen, revisions will be needed for the following documents: Project standard, Validation and Verification Standard and Project Cycle Procedures. This scenario will decrease time and costs associated with post registration changes, and

provide an opportunity for the project proponent to develop a more practical, implementable and a realistic monitoring plan. The implementation of scenario B will be perceived as improvement in the efficiency and validation process of the CDM project cycle.

13. For scenario (C), a recommendation could be suggested by the Executive Board to the CMP for its consideration.

5. Subsequent work and timelines

14. Revise the relevant sections in three regulatory documents such as the project standard, project cycle procedure and validation and verification standards that would impact due to adoption of scenario B.

6. Recommendations to the Board

15. The secretariat recommends that the Board agree to the further work on the implementation of scenario (B) above for small scale and micro scale project activities and programme of activities.
16. The secretariat recommends that scenario (B) is not sufficient to fulfill monitoring requirements for large scale under 3/CMP.1.
17. The secretariat further more recommends the Board to forward the scenario (C) i.e. to allow conducting validation of detailed monitoring plan at the first verification for the consideration by CMP, which could benefit all the three scales of project activity (large, small and micro).

Appendix 1. Background information – Monitoring of small scale project activities.

1. Requirements in CDM M&P (FCCC/CP/2002/7/Add.3) Paragraphs 32 to 39

32. Project participants shall include, as part of the project design document for a small-scale CDM project activity or bundle of small-scale CDM project activities, a monitoring plan. The monitoring plan shall provide for the collection and archiving of the data needed to:
 - (a) Estimate or measure anthropogenic emissions by sources of greenhouse gases occurring within the project boundary during the crediting period as specified in appendix B for the relevant project category;
 - (b) Determine the baseline of anthropogenic emissions by sources of greenhouse gases occurring within the project boundary during the crediting period, as specified in appendix B for the relevant project category;
 - (c) Calculate the reductions of anthropogenic emissions by sources by the proposed smallscale CDM project activity, and for leakage effects, in accordance with provisions of appendix B for the relevant project category.
33. The monitoring plan for a small-scale CDM project activity may use the monitoring methodology specified in appendix B for the relevant project category if the designated operational entity determines at validation that the monitoring methodology reflects good monitoring practice appropriate to the circumstances of the project activity.
34. If project activities are bundled, a separate monitoring plan shall apply for each of the constituent project activities in accordance with paragraphs 32 and 33 above, or an overall monitoring plan shall apply for the bundled projects, as determined by the designated operational entity at validation to reflect good monitoring practice appropriate to the bundled project activities and to provide for collection and archiving of the data needed to calculate the emission reductions achieved by the bundled project activities.
35. Project participants shall implement the monitoring plan contained in the registered project design document, archive the relevant monitored data and report the relevant monitoring data to a designated operational entity contracted to verify the emission reductions achieved during the crediting period specified by the project participants.
36. Revisions, if any, to the monitoring plan to improve its accuracy and/or completeness of information shall be justified by project participants and shall be submitted for validation to a designated operational entity.

37. The implementation of the registered monitoring plan and its revisions, as applicable, shall be a condition for verification, certification and the issuance of certified emission reductions (CERs).
38. Subsequent to the monitoring and reporting of reductions in anthropogenic emissions, CERs resulting from a small-scale CDM project activity during a specified time period shall be calculated, applying the registered methodology, by subtracting the actual anthropogenic emissions by sources from baseline emissions, and adjusting for leakage, as appropriate, in accordance with appendix B for the relevant project category.
39. The project participants shall provide to the designated operational entity, contracted by the project participants to perform the verification, a monitoring report in accordance with the registered monitoring plan set out in paragraph 32 above for the purpose of verification and certification.

2. Requirements related to monitoring in the CDM regulatory documents project standard, validation and verification standard and project cycle procedures.

2.1. According to the “Clean development mechanism validation and verification standard” section 7.11.2 Description of project activity - Means of Validation:

65. Unless other means are specified in the methodology, the DOE shall conduct a **physical site inspection** for the following proposed project activities in existing facilities or utilizing existing equipment:
 - (a) Large-scale projects;
 - (b) Non-bundled small-scale projects with emission reductions exceeding 15,000 tonnes per year;
 - (c) Bundled small-scale projects, each with emission reductions not exceeding 15,000 tonnes per year; in such cases the number of physical site visits may, however, be based on sampling, if the sampling size is justified through statistical analysis;
66. For other individual proposed small-scale CDM project activities with emission reductions not exceeding 15,000 tonnes per year, the DOE should conduct a physical site visit as appropriate. For proposed CDM project activities for which the DOE does not undertake a physical site inspection this shall be justified. The DOE may apply a sampling approach in accordance with the “Standard for sampling and surveys for CDM project activities and programme of activities”;
67. For all other proposed CDM project activities not referred to in a-b above, the DOE shall undertake the validation of project description by reviewing available designs and feasibility studies and should conduct comparison analysis with equivalent projects, as appropriate;
68. If the proposed CDM project activity involves the alteration of an existing installation or process, the DOE shall ensure that the project description states the differences resulting from the project activity compared to the pre-project situation.

2.2. According to the “Clean development mechanism validation and verification standard” section 7.12.14 “Monitoring Plan”:

7.12.14.1 Validation requirement:

131. The DOE shall determine whether the description of the monitoring plan included in the PDD is based on the approved monitoring methodology including applicable tool(s).

7.12.14.2 Means of Validation:

132. The DOE shall apply a two-step process to meet the above requirement:
- (a) To assess compliance of the monitoring plan with the approved methodology and the applicable tool(s), the DOE shall:
 - (i) Identify the list of parameters required by the selected approved methodology including applicable tool(s) by means of document review;
 - (ii) Confirm that the description of the monitoring plan contains all necessary parameters, that they are described and that the means of monitoring described in the plan complies with the requirements of the methodology including applicable tool(s);
 - (b) To assess the implementation of the plan the DOE shall, by means of review of the documented procedures, interviews with relevant personnel, project plans and any physical inspection of the proposed project activity site, assess whether:
 - (i) The monitoring arrangements described in the monitoring plan are feasible within the project design;
 - (ii) The means of implementation of the monitoring plan, including the data management and quality assurance and quality control procedures, are sufficient to ensure that the emission reductions achieved by/resulting from the proposed project activity can be reported ex post and verified.

7.12.14.3 Reporting requirements:

133. The DOE shall:
- (a) State its opinion on the compliance of the described monitoring plan with the requirements of the methodology including applicable tool(s);
 - (b) Describe the steps undertaken to assess whether the monitoring arrangements described in the monitoring plan are feasible within the project design;
 - (c) State its opinion on the project participants’ ability to implement the described monitoring plan.

3. According to the “Clean development mechanism project standard” (appendix 1 Changes that do not require prior approval by the board):

2. Temporary deviations from the registered monitoring plan or applied methodology:

2. If project participants have temporarily not monitored parameters related to baseline GHG emissions or are unable to produce evidence related to such monitoring, prior approval by the Board is not required if project participants report these parameters as zero.
3. If project participants have temporarily not monitored parameters related to project GHG emissions or are unable to produce evidence related to such monitoring, prior approval by the Board is not required if project participants estimate these parameters assuming that the source of the GHG emissions operated at maximum capacity for the full period of the missing data. In the case of project GHG emissions related to the consumption of electricity, the estimate shall include an addition of 10% to account for transmission and distribution losses.

3. Permanent changes from the registered monitoring plan or applied methodology:

4. If the monitoring equipment actually installed has a lower accuracy level than the one stipulated in the applied methodology and/or in the registered monitoring plan, and the monitoring equipment is under the control of the project participants, prior approval by the Board is not required if project participants adjust the value measured with the equipment as follows:
 - (a) If the parameter is used for calculating baseline GHG emissions, the difference between the accuracy level of the installed monitoring equipment and the accuracy prescribed by the applied methodology and/or the registered monitoring plan is deducted from the measured value;
 - (b) If the parameter is used for calculating project GHG emissions, the difference between the accuracy level of the installed monitoring equipment and the accuracy prescribed by the applied methodology and/or the registered monitoring plan is added to the measured value;
5. Changes to the monitoring of the registered CDM project activity of a type listed below do not require prior approval by the Board:
 - (a) Change of calibration frequency or practice for monitoring equipment not within the control of project participants;
 - (b) Change of accuracy/type/model of meter(s) as per a power purchase agreement (PPA); or
 - (c) Change of location of meter(s) as per a power purchase agreement (PPA).

4. The “Procedure: Clean development mechanism project cycle procedure”

1. Section 6.2 “Changes to registered CDM project activity or programme of activities” states that: A request for approval of changes may be submitted in respect of the following changes that have occurred or are expected to occur to a registered CDM project activity or PoA: Permanent changes to the monitoring plan as described in the registered PDD or the monitoring methodology, including changes to apply the provisions of the most recent version of the “Standard for sampling and surveys for CDM project activities and programme of activities”.
2. An approved monitoring methodology (e.g. AMS-III.BJ) will provide the following information for each parameter that is monitored:

Data / Parameter:	BE_{EG,y}
Data unit:	t CO ₂
Description:	Baseline emissions due to project net energy generation
Source of data:	Electricity meters, flow meters, enthalpy measurements
Measurement procedures (if any):	Apply procedures from AMS-I.C and/or AMS-I.D, as applicable
Monitoring frequency:	Continuously
QA/QC procedures:	Cross check with receipts for energy sold/exported and with the amount of syngas generated
Any comment:	The net electricity generation shall be derived from the gross generation minus the on-site consumption, calculated on an annual basis

Appendix 2. Comments by the Methodology Panel (as recorded in the internal report)

1. The Meth Panel agreed to recommend the approach described in scenario (b) of the draft concept note (delay in the validation of the monitoring plan), to have the option to validate partially the monitoring plan during the validation of a project activity and detailing the monitoring plan on how, where, by whom and by what means prior to or at verification stage. The initial part of validation will involve assessing the compliance of the monitoring plan with the approved methodology and the applicable tool(s) (e.g. identify the list of parameters required by the selected approved methodology including applicable tool(s) by means of document review).

Appendix 3. Comments by the Small scale working group (as recorded in the internal report)

1. Concept note to address Decision 3/CMP.9 (paragraph 10) “Requests the Executive Board to analyse allowing the validation of monitoring plans for small-scale and microscale project activities and programmes of activities before their first verifications;” for which 4 scenarios were discussed. The SSC WG agreed to recommend the approach described in scenario (b) of the draft concept note (delay in the validation of the monitoring plan), to have the option to validate partially the monitoring plan during the validation of a project activity and detailing the monitoring plan on how, where, by whom and by what means prior to or at verification stage. The initial part of validation will involve assessing the compliance of the monitoring plan with the approved methodology and the applicable tool(s) (e.g. identify the list of parameters required by the selected approved methodology including applicable tool(s) by means of document review). The SSC WG further agreed to recommend that the secretariat: i) provides assistance to project participants in developing monitoring plans as well as to DOEs in the validation of the monitoring plans and ii) prepares guidance on issues to consider when implementing a monitoring plan to avoid post registration changes.

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