CLEAN DEVELOPMENT MECHANISM

CDM-EB65-A05-STAN

Standard

CDM project standard

Version 07.0

United Nations
Framework Convention on
Climate Change

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1. Introduction

1.1. Background

1. The Conference of the Parties serving as the Meeting of the Parties to the Kyoto Protocol (hereinafter referred to as the CMP), at its first session, established the basis of the regulatory framework for the clean development mechanism (hereinafter referred to as the CDM) to implement Article 12 of the Kyoto Protocol through the following:

    (a) Annex to decision 3/CMP.1: Modalities and procedures for a clean development mechanism (hereinafter referred to as the CDM M&Ps);

    (b) Annexes to decision 4/CMP.1, including annex II: Simplified modalities and procedures for small-scale clean development mechanism project activities (hereinafter referred to as the CDM SSC M&Ps);

    (c) Annex to decision 5/CMP.1: Modalities and procedures for afforestation and reforestation project activities under the clean development mechanism (hereinafter referred to as the CDM A/R M&Ps);

    (d) Annex to decision 6/CMP.1: Simplified modalities and procedures for small-scale afforestation and reforestation project activities under the clean development mechanism (hereinafter referred to as the CDM SSC A/R M&Ps);

    (e) Decision 7/CMP.1;

    (f) Annex to decision 10/CMP.7: Modalities and procedures for carbon dioxide capture and storage in geological formations under the clean development mechanism (hereinafter referred to as the CDM CCS M&Ps).

2. The CMP revised some of the provisions in these decisions through new decisions in subsequent sessions.

3. Pursuant to its mandate from the CMP to operationalize the CDM, the Executive Board of the clean development mechanism (hereinafter referred to as the Board) has adopted various standards (including methodologies, tools and standardized baselines), procedures, guidelines, clarifications and forms, and revised them, as appropriate, with a view to improving the CDM process.

4. At its fifty-ninth meeting, the Board adopted the “CDM management plan 2011” whose objective 3(b) is: “Clarification, consolidation and enhancement of the consistencies of all the existing regulatory decisions of the board that relate to validation and verification of project activities”. One deliverable under this objective is to “develop a standard for project participants, i.e. obligations on project participants during validation, operation and verification of project activities”.

1.2. Objectives

5. The objectives of the "CDM project standard" (hereinafter referred to as this Standard) are to:

   (a) Enhance consistency and clarity of requirements applicable to any type of CDM project activities and CDM programmes of activities (PoA), and facilitate and promote a clear and common understanding by all parties involved in the CDM;

   (b) Improve the quality of project design documents (PDDs), PoA design documents (PoA-DDs), component project activity (CPA) design documents (CPA-DDs) and monitoring reports prepared by project participants and submitted in the CDM project cycle;

   (c) Enhance the overall efficiency and integrity in the CDM.

2. Scope, applicability and entry into force

2.1. General

6. This Standard provides project participants and coordinating/managing entities with a starting point for those wishing to design and implement a CDM project activity or PoA and seeking issuance of certified emission reductions (CERs). It specifies requirements for project participants and coordinating/managing entities to comply with in designing as well as implementing any type of CDM project activities or PoAs and monitoring greenhouse gas (GHG) emission reductions by sources or GHG removals by sinks.

2.2. Application

7. Principles in chapter 5 and requirements in chapters 6 and 7 of this Standard apply to any type of CDM project activities and PoA.

8. In addition to requirements in chapters 6 and 7, requirements in chapters 8, 9, 10, 11 and 12 specifically apply to small-scale project activities, large-scale afforestation and reforestation (A/R) project activities, small-scale A/R project activities, carbon dioxide capture and storage (CCS) project activities and PoAs, respectively.

9. Therefore, requirements in chapters 6, 7, 8, 9, 10 and 11 applicable to project participants for CDM project activities apply, where applicable, to coordinating/managing entities for CDM PoAs.

10. Requirements in chapter 13 apply to any type of CDM project activities and, as applicable, to CDM PoA. However, as experience with PoA is evolving, the applicability of certain requirements to PoA are yet to be defined and will be addressed in the future.

11. The document information section at the end of this Standard lists all documents that are superseded by this Standard, the "CDM validation and verification standard" and the "CDM project cycle procedure".

2.3. Entry into force

12. Version 07.0 of this Standard enters into force on 25 June 2014.

3. Normative references

13. The following referenced documents are indispensable for the application of this Standard:

    (a) "CDM project cycle procedure" (hereinafter referred to as the Project cycle procedure);

    (b) "Glossary of CDM terms".

4. Terms and definitions

14. In addition to the definitions contained in the "Glossary of CDM terms", the following terms apply in this Standard:

    (a) "Shall" is used to indicate requirements to be followed;

    (b) "Should" is used to indicate that among several possibilities, one course of action is recommended as particularly suitable;

    (c) "May" is used to indicate what is permitted;

    (d) "Standardized baseline that standardizes additionality" is a standardized baseline established for a Party or a group of Parties to facilitate the determination of additionality (e.g. by providing a positive list of technologies, fuel or feedstock) for CDM project activities or PoAs, while providing assistance for assuring environmental integrity;

    (e) "Standardized baseline that standardizes baseline scenario" is a standardized baseline established for a Party or a group of Parties to facilitate the determination of the baseline scenario (e.g. by providing a description of the baseline scenario) for CDM project activities or PoAs, while providing assistance for assuring environmental integrity;

    (f) "Standardized baseline that standardizes baseline emissions" is a standardized baseline established for a Party or a group of Parties to facilitate the calculation of one or several sources of baseline emissions (e.g. by providing standardized values of parameters such as emission factors) for CDM project activities or PoAs, while providing assistance for assuring environmental integrity.

5. Principles

5.1. General

15. The following principles[1] guide project design as well as project implementation and monitoring of GHG emission reductions by sources or GHG removals by sinks, and contribute to enhancing the environmental integrity of CDM project activities and PoAs.

5.2. Relevance

16. Select the GHG sources, GHG sinks, GHG reservoirs, data, methodologies and all other information appropriate to the needs of the intended user.[2]

5.3. Completeness

17. Include all relevant GHG sources and sinks, and information to support compliance with all requirements.

5.4. Consistency

18. Enable meaningful comparisons in project-related information.

5.5. Accuracy and conservativeness

19. Reduce bias and uncertainties as far as is practical/cost-effective, or otherwise use conservative assumptions, values and procedures to ensure that GHG emission reductions by sources or GHG removals by sinks are not over-estimated.

5.6. Transparency

20. Disclose sufficient and appropriate project-related information in a truthful manner to allow intended users to make decisions with reasonable confidence.

6. General requirements

6.1. Use of and compliance with applicable standards

21. While designing as well as implementing and monitoring a CDM project activity or PoA, project participants shall consider and use, in addition to this Standard, all applicable methodologies, standardized baselines, tools and documents adopted by the CMP or the Board.[3]

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[1] This text is adapted to the CDM and is taken from ISO 14064-2:2006 - Greenhouse gases -- Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements; it is reproduced with the permission of the International Organization for Standardization, ISO. This standard can be obtained from any ISO member and from the website of the ISO Central Secretariat at the following address: www.iso.org. Copyright remains with ISO.

[2] Intended users may include designated operational entities (DOEs), the Executive Board of the CDM, the UNFCCC secretariat, designated national authorities (DNAs) and local and other stakeholders.

[3] These documents are available on the UNFCCC CDM website.

22. Project participants shall ensure that the proposed CDM project activity or PoA complies with all requirements in the CDM M&Ps applicable to the project activity or PoA, as presented in paragraph 1 above, all applicable requirements in this Standard and all other applicable CDM rules and requirements.

6.2. Identification of project type

23. Project participants shall determine the type of CDM project activity or PoA they want to design and implement:

    (a) Large-scale project activity;

    (b) Small-scale project activity;

    (c) Large-scale afforestation or reforestation project activity;

    (d) Small-scale afforestation or reforestation project activity; or

    (e) CCS project activity; or

    (f) Programme of activities, either large-scale, small-scale, large-scale A/R or small-scale A/R, or CCS.

6.3. Selection of methodology

24. Project participants shall select a baseline and monitoring methodology that has been approved by the Board and that is applicable to the proposed CDM project activity or PoA (hereinafter referred to as selected methodology).

25. In their consideration of baseline and monitoring methodologies applicable to the proposed CDM project activity or PoA, project participants may:

    (a) Submit a request for revision to an approved methodology through a designated operational entity (DOE) or directly to the UNFCCC secretariat (hereinafter referred to as the secretariat) in accordance with the applicable procedure;

    (b) Develop and propose a new methodology, in accordance with the applicable guidelines and procedure.

26. Project participants wishing to seek clarification on the applicability of a baseline and monitoring methodology or methodological tool approved by the Board may submit a request for clarification through a DOE or directly to the secretariat in accordance with the applicable procedure.

6.4. Selection of standardized baseline

27. Project participants may select an approved standardized baseline (hereinafter referred to as selected standardized baseline) if the approved standardized baseline is valid and applicable to the proposed CDM project activity or PoA and to the selected methodology in accordance with its applicability section.

28. However, project participants shall select an approved standardized baseline (hereinafter referred to as selected standardized baseline) if:

(a) The approved standardized baseline is valid and applicable to the proposed CDM project activity or PoA and to the selected methodology in accordance with its applicability section;

(b) The selection of the applicable approved standardized baseline is mandatory.[4]

29. Notwithstanding the provisions in paragraphs 27 and 28 above, project participants shall not select an applicable approved standardized baseline that standardizes additionality if the start date of the proposed CDM project activity or PoA is before the date when the approved standardized baseline becomes valid.

30. If the PDD or PoA-DD has been published for global stakeholder consultation when no applicable approved standardized baseline was valid, and if after the publication of the PDD or PoA-DD for global stakeholder consultation but before the submission of a request for registration of the proposed CDM project activity or PoA, an applicable approved standardized baseline whose selection is mandatory has become valid, the request for registration may be submitted without selecting the standardized baseline within 240 days after the standardized baseline became valid.

31. In their consideration of an approved standardized baseline applicable to the proposed CDM project activity or PoA, project participants shall follow the "Procedure: Development, revision, clarification and update of standardized baselines", if they wish to:

(a) Propose a new standardized baseline;

(b) Request a revision(s) to an approved standardized baseline;

(c) Seek clarification on an approved standardized baseline; or

(d) Propose an updated standardized baseline.

6.5. Demonstration of prior consideration of the clean development mechanism

32. If the start date of a proposed CDM project activity, as determined in paragraph 65 below, is prior to the date of publication of the PDD for the global stakeholder consultation, project participants shall demonstrate that the CDM benefits were considered necessary in the decision to undertake the project as a proposed CDM project activity.

33. For a proposed CDM project activity with a start date on or after 2 August 2008, project participants shall inform the host Party's designated national authority (DNA) and the secretariat of their intention to seek CDM status in accordance with the Project cycle procedure.

34. For a proposed CDM project activity with a start date before 2 August 2008 and prior to the date of publication of the PDD for global stakeholder consultation, project participants shall demonstrate that the CDM was seriously considered in the decision to

[4] Such standardized baselines include ASB0001 and ASB0003 that state in their applicability section that the latest approved and valid values of the standardized baseline are the only values of the CO_2 emission factor(s) that shall be applied for the project electricity system.

implement the proposed project activity. Such demonstration requires the following elements to be satisfied:

(a) Project participants shall provide evidence of their awareness of the CDM prior to the start date of the proposed project activity, and that the benefits of the CDM were a decisive factor in the decision to proceed with the project;[5]

(b) Project participants shall provide evidence that continuing and real actions were taken to secure CDM status for the proposed project activity in parallel with its implementation;[6]

(c) Project participants shall provide an implementation timeline of the proposed CDM project activity. The timeline should include, where applicable, the date when the investment decision was made, the date when construction works started, the date when commissioning started and the date of start-up (e.g. the date when commercial production started). Project participants shall provide a timeline of events and actions, which have been taken to achieve CDM registration, with description of the evidence used to support these actions.

35. The requirements in paragraphs 32–34 above do not apply to CDM PoAs.

7. Design requirements for all project types

7.1. Description of project activity or programme of activities

36. Project participants shall provide a description of the proposed CDM project activity or PoA that provides an understanding of the nature of the project and its implementation.

37. When describing the proposed CDM project activity or PoA, project participants shall:

(a) Provide a title for the project activity or PoA;

(b) Describe the purpose of the project activity, including a summary of the scope of activities/measures that are to be implemented within the project activity;

(c) Explain how the project activity or PoA will reduce GHG emissions or increase GHG removals;

(d) Identify the location of the project activity, including information allowing the unique identification of the project activity;

[5] Evidence to support this could include, inter alia, minutes and/or notes related to the consideration of the decision by the Board of Directors, or equivalent, of the project participants, to undertake the project as a CDM project activity.

[6] Evidence to support this should include one or more of the following: contracts with consultants for CDM/PDD/methodology/standardized baseline services; draft versions of PDDs and underlying documents such as letters of authorization, and if available, letters of intent; emission reduction purchase agreement (ERPA) term sheets, ERPAs, or other documentation related to the sale of the potential CERs (including correspondence with multilateral financial institutions or carbon funds); evidence of agreements or negotiations with a DOE for validation services; submission of a new methodology or standardized baseline, or requests for clarification or revision of existing methodologies or standardized baselines to the Board; publication in a newspaper; interviews with DNA; earlier correspondence on the project with the DNA or the secretariat.

(e) Describe the technology to be employed by the project activity to enable the identification of the project's scale and type, demonstration of additionality, application of the selected methodology and, where applicable, of the selected standardized baseline, and calculations of GHG emission reductions or net GHG removals, including a description of how environmentally safe and sound technology(ies) applied in the project activity and know-how to be used are transferred to the host Party(ies);

(f) Indicate the sectoral scope(s) and type of the project activity or PoA;

(g) Explain the contribution of the project activity or PoA to sustainable development.

38. Project participants shall describe the scenario prior to the implementation of the proposed CDM project activity or CPA, including the technology(ies) employed.

39. Project participants shall identify:

(a) Parties involved in the proposed CDM project activity;

(b) Project participants of the proposed CDM project activity.

40. Project participants shall provide information on sources of public funding for the proposed CDM project activity or PoA. In cases where public funding from Parties included in Annex 1 of the United Nations Framework Convention on Climate Change (hereinafter referred to as the Convention) is involved, project participants shall provide an affirmation obtained from Parties included in Annex 1 that such funding does not result in a diversion of official development assistance, is separate from, and is not counted towards the financial obligations of those Parties.

7.2. Application of selected approved baseline and monitoring methodology and selected standardized baseline

7.2.1. General

41. Project participants shall use the version(s) of the selected methodology(ies) and, where applicable, of the selected standardized baseline(s), that is(are) valid at the time of submission of the CDM project activity or CPA for registration, in accordance with the Project cycle procedure, taking into account:

(a) The grace period of the methodology(ies) if it(they) has(have) been revised;

(b) The grace period of the standardized baseline(s), where applicable, if it(they) has(have) been revised.

42. Project participants shall apply the selected methodology(ies) and, where applicable, the selected standardized baseline(s), to the proposed CDM project activity or CPA including any tools, standards or guidelines required by the methodology(ies).

7.2.2. Reference of methodology and standardized baseline

43. Project participants shall specify the reference (number, title and version) of the selected methodology(ies) and, where applicable, of the selected standardized baseline(s) that is(are) applied to the proposed CDM project activity or CPA, including any other methodologies or tools to which the selected methodology(ies) refers.

7.2.3. Applicability of methodology and standardized baseline

44. Project participants shall demonstrate why the selected methodology(ies) and, where applicable, the selected standardized baseline(s), is(are) applicable to the proposed CDM project activity or CPA by showing that all applicability conditions of the methodology(ies) and, where applicable, the standardized baseline(s) are met.

7.2.4. Project boundary

45. Project participants shall define the boundary of the proposed CDM project activity or PoA, including the physical delineation of the project activity, and which sources and GHGs are included in the project or CPA boundary, in accordance with the selected methodology(ies) and, where applicable, the selected standardized baseline(s).

46. In cases where the selected methodology(ies) allows project participants to choose whether a source or gas is to be included in the project or CPA boundary, project participants shall explain and justify the choice.

7.2.5. Establishment and description of baseline scenario

47. Project participants shall establish the baseline scenario for the proposed CDM project activity or CPA in accordance with the selected methodology(ies).

48. When establishing the baseline scenario, and where "future anthropogenic emissions by sources are projected to rise above current levels due to the specific circumstances of the host Party", project participants should follow the "Guidelines on the consideration of suppressed demand in CDM methodologies".

49. As a general principle, national and/or sectoral policies and circumstances shall be taken into account in the establishment of a baseline scenario, without creating perverse incentives that may impact host Parties' contributions to the ultimate objective of the Convention.

50. When establishing the baseline scenario, project participants shall take into account the following two types of national and/or sectoral policies:

    (a) National and/or sectoral policies or regulations that give comparative advantages to more emissions-intensive technologies or fuels over less emissions-intensive technologies or fuels;[7]

    (b) National and/or sectoral policies or regulations that give comparative advantages to less emissions-intensive technologies over more emissions-intensive technologies (e.g. public subsidies to promote the diffusion of renewable energy or to finance energy efficiency programmes).[8]

51. Project participants shall address the two types of policies described in paragraph 50 above as follows:

    (a) Only national and/or sectoral policies or regulations described in paragraph 50(a) above that have been implemented before adoption of the Kyoto Protocol by the

[7] Such policies, which increase GHG emissions, are called type E+.

[8] Such policies, which decrease GHG emissions, are called type E-.

Conference of the Parties (hereinafter referred to as the COP) (decision 1/CP.3, 11 December 1997) shall be taken into account when establishing a baseline scenario. If such national and/or sectoral policies were implemented since the adoption of the Kyoto Protocol, the baseline scenario should refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place;

(b) National and/or sectoral policies or regulations described in paragraph 50(b) above that have been implemented since the adoption by the COP of the CDM M&P (decision 17/CP.7, 11 November 2001) need not be taken into account in establishing a baseline scenario (i.e. the baseline scenario could refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place).

52. Project participants shall describe the established baseline scenario for the proposed CDM project activity or CPA, including the technology(ies) that would be employed and/or the activities that would take place in the absence of the project activity or CPA.

53. The following applies to a proposed CDM project activity or CPA using an approved standardized baseline that standardizes the baseline scenario instead of paragraphs 47–52 above and 123–125 below: Project participants shall describe the baseline scenario(s) as per the selected standardized baseline(s).

7.2.6. Demonstration of additionality

54. Project participants shall demonstrate, in accordance with the selected methodology and the requirements relating to prior consideration of the CDM contained in section 6.5 above, that the anthropogenic emissions of GHG by sources are reduced below those that would have occurred in the absence of the proposed CDM project activity.

55. For demonstration of additionality of the proposed CDM project activity, and if it is required by the selected methodology and/or any tool referenced in the methodology, project participants shall follow:

(a) “Guidelines on the assessment of investment analysis”;

(b) “Guidelines for objective demonstration and assessment of barriers”.

56. In the demonstration of additionality of the proposed CDM project activity, project participants should also consider the following:

(a) “Guidelines on additionality of first-of-its-kind project activities”;

(b) “Guidelines on common practice”.

57. The following applies to a proposed CDM project activity using an approved standardized baseline that standardizes additionality instead of paragraphs 54–56 above and 104 and 128 below: Project participants shall demonstrate that the proposed CDM project activity meets the additionality criteria (e.g. positive lists of technologies) identified in the selected standardized baseline(s) as well as the requirements relating to prior consideration of the CDM contained in section 6.5 above.

7.2.7. Emission reductions

58. Project participants shall provide ex ante calculations of baseline, project and leakage GHG emissions as well as GHG emission reductions of the proposed CDM project activity or CPA for each year of the crediting period, in accordance with the selected methodology(ies) and, where applicable, the selected standardized baseline(s). Project participants shall describe all steps undertaken for these calculations and provide all results.

59. If the selected methodology(ies) and, where applicable, the selected standardized baseline(s) includes different scenarios or cases or provides different options and/or default values to choose, project participants shall justify which ones are applied to and/or chosen for the proposed CDM project activity or CPA.

60. Project participants shall provide the data and parameters that are not monitored throughout the crediting period but are determined only once and remain fixed throughout the crediting period. These data and parameters shall be available at the time of validation.

61. In cases where the selected methodology(ies) and, where applicable, the selected standardized baseline(s) allows the use of sampling for the determination of parameter values for calculating GHG emission reductions, project participants may use sampling. In such cases, project participants shall develop and describe the sampling plan in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities".

7.2.8. Monitoring plan

7.2.8.1. General

62. Project participants shall develop and describe the monitoring plan for the proposed CDM project activity or CPA in accordance with the selected methodology(ies), where applicable, the selected standardized baseline(s) and all other applicable CDM rules and requirements.

7.2.8.2. Data and parameters monitored

63. The monitoring plan shall include all data, parameters and related information required by the selected methodology(ies) and, where applicable, the selected standardized baseline(s).

7.2.8.3. Other elements of monitoring plan

64. The monitoring plan shall include the following:

    (a) The operational and management structure to be put in place to implement the monitoring plan;

    (b) Provisions to ensure that data monitored and required for verification and issuance be kept and archived electronically for two years after the end of the crediting period or the last issuance of CERs, whichever occurs later;

(c) Definition of responsibilities and institutional arrangements for data collection and archiving;

(d) Quality assurance and quality control (QA/QC) procedures;

(e) Uncertainty levels, methods and the associated accuracy level of measuring instruments to be used for various parameters and variables;

(f) Specifications of the calibration frequency for the measuring equipments. In cases where neither the selected methodology and, where applicable, the selected standardized baseline, nor the Board's guidance specify any requirements for calibration frequency for measuring equipments, project participants shall ensure that the equipments are calibrated either in accordance with the local/national standards, or as per the manufacturer's specifications. If local/national standards or the manufacturer's specifications are not available, international standards may be used.

7.3. Duration and crediting period

7.3.1. Duration of project activity

65. Project participants shall determine the start date of the proposed CDM project activity and provide a description of how this start date has been determined.

66. Project participants shall define the expected operational lifetime of the proposed CDM project activity.

7.3.2. Crediting period

67. Project participants shall select the type (fixed or renewable) and duration of the crediting period for the proposed CDM project activity considering that:

(a) Each renewable crediting period shall be at most seven years and may be renewed at most two times, for a maximum total length of 21 years;

(b) A fixed crediting period shall be at most 10 years.

68. Project participants shall determine the start date[9] of the crediting period of the proposed CDM project activity considering that the crediting period shall only start after the date of registration of the proposed project activity as a CDM project activity.

69. Project participants shall determine only one start date for the crediting period, even in cases of phased implementation of the proposed CDM project activity.

70. Project participants shall state the start date of the crediting period in the format dd/mm/yyyy, and shall not use any qualifications to the start date, such as "expected".

[9] The start date of the crediting period provided in the CDM-PDD by the project participants is an indicative date and if it is prior to the date of registration of the project activity, it will be updated by the secretariat as the effective date of registration in accordance with the Project cycle procedure. This update will not affect the specified length of the crediting period nor does this affect the rights of the project participants to subsequently request a change of the start date in accordance with the same procedure.

7.4. Environmental impacts

71. Project participants shall carry out an analysis of the environmental impacts of the proposed CDM project activity or PoA, including transboundary impacts. Project participants shall provide a summary of the analysis and references to all related documentation.

72. If project participants or the host Party considers the environmental impacts of the proposed CDM project activity or PoA significant, project participants shall carry out an environmental impact assessment in accordance with the host Party's procedures. Project participants shall provide all conclusions and references to all related documentation.

7.5. Local stakeholder consultation

73. Project participants shall invite local stakeholders to provide comments on the proposed CDM project activity or PoA and shall demonstrate how due steps/actions were taken to appropriately engage stakeholders and solicit comments.

74. Project participants shall invite comments from local stakeholders in an open and transparent manner, in a way that facilitates comments to be received from local stakeholders and allows for a reasonable time for comments to be submitted. Project participants shall describe the proposed CDM project activity or PoA in a manner that allows the local stakeholders to understand the project activity or PoA, taking into account confidentiality provisions of the applicable CDM M&Ps.

75. Project participants shall prepare a summary of the comments provided by local stakeholders.

76. Project participants shall demonstrate that they considered all comments received for the proposed CDM project activity or PoA.

77. Project participants shall complete the local stakeholder consultation process before submitting the proposed CDM project activity or PoA to a DOE for validation.

7.6. Approval and authorization

78. Project participants shall obtain a letter of approval[10] from the DNA of each Party involved in the proposed CDM project activity confirming that:[11]

    (a) The Party is a Party to the Kyoto Protocol;

    (b) Participation in the proposed CDM project activity is voluntary;

[10] Project activities from multilateral funds involving many host Parties do not necessarily require letters of approval from the DNA of each Party. However, those not providing a letter may be giving up some of their rights and privileges in terms of being a Party involved in the proposed project activity.

A letter of approval from a Party may cover more than one proposed CDM project activity, provided that projects are clearly listed in the letter.

[11] At the time of making the PDD public at the stage of validation, a Party involved may or may not have provided its approval of the proposed CDM project activity, but by the time of requesting registration, approval from all Parties involved shall be obtained.

(c) Project participants are authorized to participate in the proposed CDM project activity.

79. In addition to the requirement in paragraph 78 above, for project participants from the host Party, the letter of approval shall also confirm that the proposed CDM project activity assists the host Party in achieving sustainable development.

7.7. Modalities of communications

80. Project participants shall define for the proposed CDM project activity or PoA their modalities of communication with the Board and present them in a Modalities of communication statement (MoC statement), with the following content:

(a) The title of the proposed CDM project activity or PoA (and UNFCCC reference number if available);

(b) The date of submission of the MoC statement (to a DOE for inclusion in the request for registration or to the secretariat for changes after registration);

(c) The designation of a focal point for each scope of authority, contact details and specimen signatures of the authorized signatories of each focal point entity;

(d) A list of all project participants, contact details and specimen signatures of their authorized signatories;

(e) The signature of an authorized signatory (electronic if available) of all project participants confirming their agreement with the MoC statement.

7.8. Validation

81. Project participants wishing to submit a CDM project activity for validation shall prepare a PDD using the latest version of the CDM-PDD form applicable to the project activity, taking into account the grace period of the form if it has been revised.[12]

82. When completing the PDD, project participants shall provide all necessary information and documentation to demonstrate compliance of the proposed CDM project activity with all applicable requirements in this Standard and other CDM rules and requirements.

83. When completing the PDD, project participants should follow the applicable instructions for filling out CDM-PDD forms attached to the CDM-PDD forms.

84. Project participants shall select a DOE for the validation of the proposed CDM project activity that is accredited for the validation function and sectoral scopes(s)[13] of the project activity. Project participants shall have a contractual arrangement with the DOE for the validation.

85. Project participants shall submit the completed PDD of the proposed CDM project activity, together with supporting documentation, to the selected DOE for validation.

[12] All various PDD forms and related guidelines are available on the UNFCCC CDM website.

[13] The list of all 16 sectoral scopes, the DOEs accredited in each scope as well as the approved baseline and monitoring methodologies linked with these sectoral scopes are given on the UNFCCC CDM website.

86. Information used to demonstrate additionality, describe the application of the selected methodology and, where applicable, the selected standardized baseline, and support an environmental impact assessment shall not be considered proprietary or confidential.

87. Before publishing the PDD for the proposed CDM project activity or CPA for global stakeholder consultation, in accordance with the Project cycle procedure, project participants may request the DOE to seek guidance from the Board on the acceptability of a deviation from

    (a) The selected methodology(ies); or

    (b) A section (or sections) in the selected methodology that is(are) not standardized by the selected standardized baseline(s), if the proposed CDM project activity uses an approved standardized baseline.

8. Specific design requirements for small-scale project activities

8.1. General requirements

88. Project participants designing a small-scale CDM project activity following the CDM SSC M&Ps shall only use small-scale methodologies and, where applicable, standardized baselines. However, project participants may use a large-scale methodology and, where applicable, a standardized baseline for a project activity that is within the small-scale project activity thresholds if the project activity follows the CDM M&Ps.

8.2. Project activity eligibility

89. Project participants shall indicate, from among the following below, the project type of the proposed small-scale CDM project activity, and shall demonstrate that the project activity qualifies as this type:

    (a) Type I: Renewable energy project activities with a maximum output capacity of 15 MW (or an appropriate equivalent);

    (b) Type II: Energy efficiency improvement project activities that reduce energy consumption, on the supply and/or demand side, with a maximum output of 60 GWh per year (or an appropriate equivalent) in any year of the crediting period; or

    (c) Type III: Other project activities not included in Type I or Type II that result in GHG emission reductions not exceeding 60 kt CO2e per year in any year of the crediting period.

90. In connection with paragraph 89 above and the scope of the maximum output capacity of 15 MW, project participants shall consider the following:

    (a) Regarding “maximum output”, “output” is the installed/rated capacity as indicated by the manufacturer of the equipment or plant, irrespective of the actual load factor of the plant. The installed/rated capacity for renewable electricity generating units that involve turbine-generator systems shall be based on the installed/rated capacity of the generator;

(b) Regarding the "appropriate equivalent" of 15 MW, decision 17/CP.7, paragraph 6(c)(i), refers to MW, but project participants may refer to MW(p)[14], MW(e) or MW(th). As MW(e) is the most common denomination, MW is defined as MW(e), and otherwise an appropriate conversion factor is to be applied;

(c) For biomass, biofuel and biogas project activities, the maximal limit of 15 MW(e) is equivalent to a 45 MW thermal output of the equipment or the plant (e.g. boilers). For thermal applications of biomass, biofuels or biogas (e.g. cook stoves), the limit of 45 MWth is the installed/rated capacity of the thermal application equipment or device(s) (e.g. biogas stoves). For electrical or mechanical applications, the limit of a 15 MW installed/rated output shall be used. In the case of co-firing renewable and fossil fuels, the rated capacity of the system when using fossil fuel shall apply;

(d) For thermal applications of solar energy projects,[15] "maximum output" shall be calculated using a conversion factor of 700 Wth/m2 of aperture area of glazed flat plate or evacuated tubular collector, i.e. the eligibility limit in terms of aperture area is 64,000 m2 of the collector. Project participants may also use other conversion factors determined as per the requirements in paragraph 99 below, but shall then justify why the chosen conversion factor is more appropriate to the project activity.

91. Project participants shall ensure that the proposed small-scale CDM project activity remains, for every year during the crediting period, within the limits of the type of project activity defined in paragraph 89 above. If during its implementation and monitoring the project activity goes beyond the limit of its type in any year of the crediting period, the GHG emission reductions that can be claimed during this particular year shall be capped at the maximum GHG emission reductions estimated in the registered PDD for that year during the crediting period.

92. Project participants shall consider that:

(a) The three types of small-scale CDM project activities defined in paragraph 89 above are mutually exclusive. In a small-scale project activity with more than one component following the CDM SSC M&Ps, each component shall meet the threshold criterion of each applicable type;

(b) The sum of the size of components of a small-scale CDM project activity belonging to the same type shall not exceed the limits for small-scale project activities.

8.3. Bundling of project activity

93. If project participants bring together more than one small-scale CDM project activities as a bundle, project participants shall follow the "General principles for bundling".

[14] For solar photovoltaic applications, 15 MW(p) may be defined by manufacturers' specifications under testing conditions of 1000 W/m^2 and 25 deg C or 600 W/m^2 and 35 deg C.

[15] This conversion is not applicable for solar thermal parabolic and trough type collectors used for high grade solar thermal energy applications.

94. Project participants shall also ensure that the sum of the output capacity of the proposed CDM project activities within a sub-bundle does not exceed the maximum output capacity limit for its type.

8.4. Debundling for project activity

95. Project participants shall demonstrate that the proposed small-scale CDM project activity is not a debundled component of a large-scale project activity.

96. Project participants shall follow the applicable provisions in the "Guidelines on assessment of debundling for SSC project activities".

8.5. Description of project activity

97. In describing the proposed small-scale CDM project activity, project participants shall indicate the type of project activity, as defined in paragraph 89 above.

8.6. Application of selected baseline and monitoring methodology and selected standardized baseline

8.6.1. General

98. If the proposed small-scale CDM project activity involves more than one component, project participants shall provide ex ante calculations of baseline, project and leakage GHG emissions as well as GHG emission reductions for each year of the crediting period and for each component separately.

99. To determine the performance of equipment used in the proposed small-scale CDM project activity, project participants shall use:

(a) The appropriate value specified in the selected methodology or, where applicable, the selected standardized baseline;

(b) The national standard for the performance of the equipment type (project participants shall identify the standard used) if the value specified in subparagraph (a) is not available;

(c) An international standard for the performance of the equipment type, such as International Organization for Standardization (ISO) and International Electrotechnical Commission (IEC) standards (project participants shall identify the standard used) if the value specified in subparagraph (b) is not available;

(d) The manufacturer's specifications, provided that they are tested and certified by national or international certifiers, if the value specified in subparagraph (c) is not available;

(e) Performance data from test results conducted by an independent entity for equipment installed under the project activity if the value specified in subparagraph (d) is not available.

100. In cases where leakage is to be considered in the proposed small-scale CDM project activity, project participants shall consider leakage only within the boundaries of non-Annex I Parties.

101. In case of replacement of existing equipments, project participants shall estimate the point in time where the existing equipments would be replaced in the absence of the proposed small-scale CDM project activity in accordance with the "Tool to determine the remaining lifetime of equipment".

102. For household devices/appliances, project participants may disregard the remaining lifetime.

103. Project participants shall consider that norms, specifications, standards and test procedures cited in the selected methodology and, where applicable, the selected standardized baseline refer to the latest version of the documentation available at the time of submission of the PDD to the DOE for validation.

8.6.2. Demonstration of additionality

104. For demonstration of additionality of a proposed small-scale CDM project activity, project participants shall apply or use one of the following:

(a) "Attachment A of Appendix B". In such cases, project participants should also follow the "Non-binding practice examples to demonstrate additionality for SSC project activities";

(b) Any applicable additionality tool; or

(c) "Guidelines for demonstrating additionality of microscale project activities", if the proposed project activity meets one of the following criteria:

(i) Type I: Project activities up to 5 MW that employ renewable energy as their primary technology;

(ii) Type II: Energy efficiency project activities that aim to achieve energy savings at a scale of no more than 20 GWh per year; or

(iii) Type III: Other project activities not included in Type I or Type II that aim to achieve GHG emissions reductions at a scale of no more than 20 kt CO_2e per year.

8.6.3. Monitoring plan

105. In developing the monitoring plan for the proposed small-scale CDM project activity, project participants shall consider the following:

(a) Data variables that impact the GHG emission reductions continuously (e.g. quantity of the fuel inputs, amount of heat or electricity produced, gas captured) shall be measured continuously and recorded at appropriate intervals. Data elements that are generally constant (e.g. emission factors, calorific value, system efficiencies) shall be measured or calculated at least once a year, unless other specifications are provided in the selected methodology or, where applicable, the selected standardized baseline;

(b) Measuring equipments shall be certified to national or IEC standards;

(c) The calibration of measuring equipments shall be carried out by an accredited person or institution;

(d) Measured data with high levels of uncertainty or without adequate calibration shall be compared with location/national data and commercial data to ensure consistency.

106. For parameters to be measured in accordance with the selected methodology or, where applicable, the selected standardized baseline, project participants shall include in the monitoring plan the following:

(a) The measurement methods and procedures, including accepted industry standards or national or international standards that will be applied; the measuring equipments that will be used; how the measurements will be undertaken; the accuracy of the measurement methods; the measurement intervals and the responsible person/entity who will undertake the measurements;

(b) The calibration procedures to be applied and the responsible person/entity who will perform the calibration.

8.7. Environmental impacts

107. The following applies instead of paragraphs 71–72 above: If required by the host Party, project participants shall carry out an analysis of the environmental impacts of the proposed small-scale CDM project activity, and provide a summary of the analysis and the reference to all related documentation.

8.8. Validation

108. If project participants wish to present a small-scale CDM project activity with more than one component in the same PDD, project participants shall provide the information regarding the sections covering the type and technology/measure of the project activity and application of the selected methodology and, where applicable, the selected standardized baseline separately for each component.

9. Specific design requirements for afforestation and reforestation project activities

9.1. Description of project activity

109. When describing the proposed A/R CDM project activity, project participants shall:

(a) Describe the present environmental conditions of the area planned for the project activity, including the climate, hydrology, soils and ecosystems;

(b) Describe the presence, if any, of rare and endangered species and their habitats;

(c) Describe the species and varieties selected for the project activity;

(d) Describe the technologies and know-how that will be transferred to the host Party(ies), if applicable;

(e) Describe or list the legal title(s) to the land, current land tenure and rights enabling determination of the owner of the temporary CERs (tCERs) or long-term CERs (lCERs) to be issued for the project activity.

9.2. Project boundary

110. Project participants shall define the project boundary that geographically delineates the proposed A/R CDM project activity under the control of the project participants, including information allowing the unique identification(s) of the project activity. If the proposed A/R CDM project activity contains more than one discrete area of land, each discrete area of land shall have a unique identification.

111. Project participants shall demonstrate that, for all areas of land planned for the proposed A/R CDM project activity, the control over afforestation or reforestation as required by the CDM A/R M&Ps is already established or is expected to be established. The control of the project participants over afforestation or reforestation shall be considered as established if the project participants have the exclusive right to perform the proposed A/R CDM project activity, defined in a way that is acceptable under the legal system of the host country.

112. When submitting the PDD for validation, project participants shall have established the control over afforestation or reforestation for at least two-thirds of the total area of land planned for proposed A/R CDM project activity.

113. When submitting the PDD for validation, project participants shall demonstrate that all areas of land planned for the proposed A/R CDM project activity comply with all requirements, except those related to the control.

114. If the control over afforestation or reforestation is not established for all areas of land planned for the proposed A/R CDM project activities when submitting the PDD for validation, project participants shall:

    (a) Demonstrate additionality separately for:

        (i) The area of land for which control over the project activity is already established by the project participants;

        (ii) The entire area of land;

    (b) Estimate the baseline net GHG removals by sinks separately for:

        (i) The area of land for which control over the project activity is already established by the project participants;

        (ii) The entire area of land.

115. Project participants shall express each of the estimates of baseline net GHG removals by sinks on a per hectare basis. The larger of these estimates shall be used to determine the baseline net GHG removals by sinks for the proposed A/R CDM project activity.

116. For all areas of land for which control over the registered A/R CDM project activity has not yet been established when the PDD is submitted for validation, project participants shall provide evidence of control at the latest by the time of submitting the first monitoring report for verification.

117. When submitting the first monitoring report for verification, the project boundary shall be fixed in such a way that it geographically delineates exclusively the registered CDM A/R project activity under the control of the project participants.

9.3. Eligibility of land

118. Project participants shall demonstrate that each discrete area of land to be included in the project boundary is eligible for an A/R CDM project activity, in accordance with the selected methodology, the "A/R methodological tool: Demonstration of eligibility of lands for A/R CDM project activities" or, where applicable, the selected standardized baseline.

9.4. Addressing non-permanence

119. Project participants shall specify which of the following approaches to address non-permanence has been selected for the proposed A/R CDM project activity, considering that this approach shall remain fixed for the crediting period including any renewals:

    (a) Issuance of tCERs; or

    (b) Issuance of lCERs.

9.5. Application of selected baseline and monitoring methodology and selected standardized baseline

9.5.1. General

120. Project participants shall select the carbon pools and GHGs to account for the proposed A/R CDM project activity in accordance with the selected methodology.

121. If the selected methodology allows the exclusion of certain carbon pools and project participants do so, they shall justify the exclusion.

122. Project participants shall ensure that the application of default data in estimation of the net anthropogenic GHG removals by sinks for the proposed A/R CDM project activity results in conservative estimates.

123. The following applies instead of paragraphs 49–51 above: In establishing a baseline scenario, project participants shall take into account relevant national and/or sectoral policies and circumstances, such as historical land use practices, without creating perverse incentives that may impact host Parties' contributions to the ultimate objective of the Convention, in the following manner:

    (a) National and/or sectoral land-use policies or regulations, which give comparative advantages to afforestation/reforestation activities and have been implemented since the adoption by the COP of the CDM M&P (decision 17/CP.7, 11 November 2001), need not be taken into account in developing a baseline scenario (i.e. the baseline scenario could refer to a hypothetical situation without the national and/or sectoral policies or regulations being in place).

124. Project participants shall establish the baseline scenario separately for each stratum of the proposed A/R CDM project activity in accordance with the selected methodology.

125. The following applies instead of paragraph 52 above: Project participants shall describe the baseline scenario established for each stratum of the proposed A/R CDM project activity, including the land-use that would occur in the absence of the project activity.

126. The following applies instead of paragraph 58 above: Project participants shall calculate and provide an estimate of the ex ante baseline net GHG removals by sinks, ex ante

actual net GHG removals by sinks, leakage, and net anthropogenic GHG removals by sinks for the proposed A/R CDM project activity for each year of the crediting period, in accordance with the selected methodology and, where applicable, the selected standardized baseline.

127. The following applies instead of paragraph 61 above: In cases where the selected methodology allows the use of sampling for the determination of parameter values for calculating net GHG removals, project participants may use sampling, in accordance with the requirements of the methodology and any applicable tool referenced in the methodology.

9.5.2. Demonstration of additionality

128. The following applies instead of paragraph 54 above: Project participants shall demonstrate, in accordance with the selected methodology and the requirements relating to prior consideration of the CDM contained in section 6.5 above, that the actual net GHG removals by sinks are increased above the sum of the changes in carbon stocks in the carbon pools within the project boundary that would have occurred in the absence of the proposed A/R CDM project activity.

9.5.3. Monitoring

129. Project participants shall plan management activities, including harvesting cycles, and verifications such that a systematic coincidence of verification and peaks in carbon stocks would be avoided.

130. Project participants shall monitor forest establishment and management, if required for the compliance with the applicability conditions of the selected methodology.

131. Project participants shall describe how the geographic coordinates of the project boundary, including boundaries of strata if any, are determined and recorded.

132. Project participants shall describe, or provide reference to, standard operating procedures (SOPs) and quality control (QC) and quality assurance (QA) procedures implemented for data monitoring, as required by the selected methodology.

133. Project participants shall identify measures to minimize potential leakage and describe how these will be implemented.

134. Project participants shall specify the procedures for the periodic review of implementation of activities and measures to minimize leakage, if required by the selected methodology.

9.6. Duration and crediting period

135. Paragraph 66 above does not apply to A/R CDM project activities.

136. The following applies instead of paragraph 67 above: Project participants shall select a crediting period for the proposed A/R CDM project activity, either renewable or fixed, considering that:

(a) Each renewable crediting period shall be a maximum of 20 years and may be renewed at most two times, for a maximum total length of 60 years;

(b) A fixed crediting period shall be at most 30 years;

(c) The provisions of paragraphs 12 and 13 of decision 17/CP.7 do not apply to A/R CDM project activities. An A/R project activity starting after 1 January 2000 can also be validated and registered after 31 December 2005 as long as the first verification of the project activity occurs after the date of registration of this project activity. Given that the crediting period starts at the same date as the starting date of the project activity, projects starting in 2000 onwards can accrue tCERs/lCERs as of the starting date.

9.7. Environmental impacts

137. Paragraphs 138–140 below apply instead of paragraphs 71–72 above.

138. Project participants shall carry out an analysis of the environmental impacts of the proposed CDM A/R project activity, including impacts on biodiversity and natural ecosystems and impacts outside the project boundary. Project participants shall provide a summary of the analysis and references to all related documentation.

139. If project participants or the host Party consider the environmental impacts of the proposed A/R CDM project activity significant, project participants shall carry out an environmental impact assessment in accordance with the host Party's procedures. Project participants shall provide all conclusions and references to all related documentation.

140. If the environmental impacts of the proposed A/R CDM project activity are considered significant, project participants shall provide a description of the planned monitoring and remedial measures to address these significant impacts.

9.8. Socio-economic impacts

141. Project participants shall carry out an analysis of the major socio-economic impacts of the proposed A/R CDM project activity, including impacts outside the project boundary. Project participants shall provide a summary of the analysis and references to all related documentation.

142. If project participants or the host Party consider any negative impact as significant, project participants shall carry out a socio-economic impact assessment, in accordance with the host Party's procedures. Project participants shall provide all conclusions and references to all related documentation.

143. If the socio-economic impacts of the proposed A/R CDM project activity are considered significant, project participants shall provide a description of the planned monitoring and remedial measures to address these significant impacts.

10. Specific design requirements for small-scale afforestation and reforestation project activities

144. Project participants shall demonstrate that the proposed small-scale A/R CDM project activity:

(a) Complies with the thresholds for the small-scale A/R CDM project activities;

(b) Complies with one of the types of small-scale A/R CDM project activities defined in appendix B of the annex to decision 6/CMP.1 and qualifies to apply one of the simplified baseline and monitoring methodologies for small-scale A/R CDM project activities;

(c) Is not part of a debundled large-scale A/R CDM project activity, in accordance with the rules defined in appendix C of the annex to decision 6/CMP.1.

145. Project participants shall provide a written declaration that the proposed small-scale A/R CDM project activity is developed or implemented by low-income communities and individuals as determined by the host Party.

11. Specific design requirements for carbon dioxide capture and storage project activities

11.1. Definitions for CCS project activities

146. **Carbon dioxide capture and storage** - the capture and transport of carbon dioxide from anthropogenic sources of emissions, and the injection of the captured carbon dioxide into an underground geological storage site for long-term isolation from the atmosphere;

147. **Geological storage site** - a paired geological formation, or a series of such formations, consisting of an injection formation of relatively high porosity and permeability into which carbon dioxide can be injected, coupled with an overlying cap rock formation of low porosity and permeability and sufficient thickness which can prevent the upward movement of carbon dioxide from the storage formation;

148. **Operational phase** - the period that begins when carbon dioxide injection commences and ends when carbon dioxide injection permanently ceases;

149. **Closure phase** - the phase that follows the operational phase and is the period that begins when carbon dioxide injection permanently ceases and ends when the geological storage site has been closed;

150. **Closure of a geological storage site** - the completion of the sealing of the geological storage site, including the appropriate plugging of wells relating to the geological storage site;

151. **Post-closure phase** - the phase that follows the closure phase and is the period that begins when the geological storage site has been closed;

152. **Seepage** - a transfer of carbon dioxide from beneath the ground surface or seabed ultimately to the atmosphere or ocean;

153. **Site development and management plan** - the documented description of how a geological storage site will be operated and managed;

154. **History matching** - the process of comparing observed results from the monitoring and measurement of a geological storage site with the results of the predictive numerical modelling of the behaviour of carbon dioxide injected into the geological storage site, and the use of the observed results to calibrate and update numerical models and modelling results. It can involve multiple iterations;

155. **Liability** - the legal responsibility arising from the CCS project activity or the relevant geological storage site, with the exception of the obligations arising from a net reversal of storage as set out in section ”Addressing non-permanence in CCS project activities” of the Project cycle procedure but including all obligations related to the operation of the storage site (e.g. monitoring, remedial measures, etc.), to compensate for or remedy any significant damages, including damage to the environment, such as ecosystem damage, other material damages or personal injury;

156. **Remedial measures** - actions and measures intended to stop or control any unintended physical leakage or seepage of carbon dioxide, to restore the integrity of a geological storage site, or to restore long-term environmental quality significantly affected by a CCS project activity;

157. **Net reversal of storage of carbon dioxide** means that:

(a) For a verification period during the crediting period, the accumulated verified reductions in anthropogenic emissions by sources of greenhouse gases (GHGs) that have occurred as a result of a registered CDM project activity are negative (i.e. the seepage from the geological storage site of the CCS project activity exceeds the remainder of the emission reductions achieved by the CCS project activity);

(b) For a verification period after the end of the last crediting period, seepage has occurred from the geological storage site of the CCS project activity.

11.2. Description of project activity or programme of activities

158. In addition to the requirements mentioned in section 7.1 above, for CCS project activities the project participants shall:

(a) Provide a description and analysis of the environmental conditions in the area of the geological storage site prior to any storage of carbon dioxide, including a description of the following:

(i) The hydrology, aquifer and groundwater properties, such as acidity and dissolved gases;

(ii) Where appropriate, the soils and soil gas properties, such as a carbon dioxide isotope analysis and carbon dioxide flux rate;

(iii) The ecosystems and the possible presence of rare or endangered or sensitive species and their habitats;

(iv) Climatic data;

(b) Demonstrate that the proposed project activity[16] does not involve:

(i) The transport of carbon dioxide from one country to another; and/or

[16] As per paragraphs 10 and 41 of decision 5/CMP.8; the CMP decided that the eligibility of these types of project activities shall be considered by the Subsidiary Body for Scientific and Technological Advice at its forty-fifth session, and also decided that although these types of project activities would merit inclusion under the CDM, more practical experience of carbon dioxide capture and storage project activities in geological formations under the CDM would be beneficial.

(ii) A geological storage site that is located in more than one country.

11.3. Host Party participation requirements

159. Project participants implementing a CCS project activity shall demonstrate that the host Party of the CCS project activity has:

(a) Submitted an expression of its agreement to the UNFCCC secretariat to allow the implementation of CCS project activities on its territory; and

(b) Established laws or regulations in accordance with the host Party participation requirements set out in section "Participation requirements of host Party for CCS project activities" of the Project cycle procedure, which state that, prior to hosting CDM CCS project activities on its territory, a host Party shall ensure that it has established laws and/or regulations which:

(i) Set procedures that include provisions for the appropriate selection, characterization and development of geological storage sites, recognizing the project requirements for CCS project activities under the CDM set out in section 11.4 below;

(ii) Define means by which rights to store carbon dioxide in, and gain access to, a subsurface pore space can be conferred to project participants;

(iii) Provide for timely and effective redress for affected entities, individuals and communities for any significant damages, such as environmental damage, including damage to ecosystems, other material damages or personal injury, caused by the project activity, including in the post-closure phase;

(iv) Provide for timely and effective remedial measures to stop or control any unintended seepage of carbon dioxide, to restore the integrity of a geological storage site, and to restore long-term environmental quality significantly affected by a CCS project activity;

(v) Establish means for addressing liability arrangements for carbon dioxide geological storage sites, taking into account the provisions set out in section 11.9 below;

(vi) For a host Party that accepts the obligation to address a net reversal of storage, establish measures to fulfil such an obligation.

160. In addition to the requirements for approval and authorization set out section 7.6 above, project participants shall seek written confirmation of the following from the DNA of the host Party:

(a) That the right to store carbon dioxide in, and gain access to, the proposed geological storage site has been conferred to them;

(b) That the host Party agrees to the financial provision described in the PDD (see section 11.8 below);

(c) That the host Party accepts the allocation of liability as proposed in the PDD and the transfer of liability (see section 11.9 below);

(d) Whether the host Party accepts the obligation to address a net reversal of storage in the situation referred to in section “Addressing non-permanence in CCS project activities” of the Project cycle procedure.

11.4. Selection and characterization of the geological storage site

161. The project participants shall describe the selection and characterization of geological storage site. Projects participants shall demonstrate that the they have selected a geological storage site:

(a) In which, under the proposed conditions of use:

(i) There is no significant risk of seepage (as evidenced by the results of the risk and safety assessment carried out in accordance with section 11.6 below);

(ii) No significant environmental or health risks exist (as evidenced by the risk and safety assessment carried out in accordance with section 11.6); and

(iii) The selected geological storage site complies with all laws and regulations of the host Party, as applicable;

(b) That is not located in international waters.

162. When selecting a geological storage site, projects participants shall evaluate:

(a) All available evidence, such as data, analysis and history matching, indicating that the injected carbon dioxide will be completely and permanently stored such that, under the proposed or actual conditions of use, no significant risk of seepage or risk to human health or the environment exists. The results of this evaluation should be supported by, and consistent with, the results of the risk and safety assessment carried out in accordance with section 11.6 below;

(b) Whether the geological storage site is suitable for potable water supply.

163. If the proposed geological storage site is suitable for potable water supply, a decision about whether the site is eligible for geological storage shall be made by the host Party, taking into account the results of the site characterization and the risk and safety assessment of the proposed geological storage site, following the procedures outlined in the CCS modalities and procedures.

164. When characterizing the geological storage site, project participants shall take the following steps:

(a) Step 1: data and information collection, compilation and evaluation. The project participant shall collect sufficient data and information to characterize the geological storage site and determine potential seepage pathways. The project participant shall evaluate (i) the collected data and information in order to make a preliminary assessment of the site’s storage capacity and to assess the viability of monitoring and (ii) the quality of the data and information and, where required, collect new data;

(b) Step 2: characterization of the geological storage site architecture and surrounding domains. The project participant shall assess the known and inferred

structures within the injection formation(s) and cap rock formation(s) that would act as barriers to, or facilitators of, the migration of injected carbon dioxide. The project participant shall compile a numerical three-dimensional static earth model (or models) of the geological storage site. The project participant shall assess the uncertainty associated with key parameters used to build the model. The model shall be used by the project participant to characterize, inter alia:

(i) The structure of the geological containment;

(ii) All relevant geological properties of the injection formation(s);

(iii) The cap rock formation(s) and overburden;

(iv) The fracture system;

(v) The areal and vertical extent of the geological storage site (e.g. the injection formation, the cap rock formation, overburden, secondary containment zones and surrounding domains);

(vi) The storage capacity in the injection formation(s);

(vii) The fluid distribution and physical properties;

(viii) Other relevant characteristics;

(c) Step 3: characterization of dynamic behaviour, sensitivity characterization and risk assessment. The project participant shall assess how the injected carbon dioxide can be expected to behave within the geological storage site architecture and surrounding domains, with a particular focus on the risk of seepage. The project participant shall utilize numerical dynamic modelling of the injected carbon dioxide using the static model developed in step 2 above to assess:

(i) Coupled processes (i.e. the interaction between each single process in the model);

(ii) Where possible, reactive processes (e.g. the interaction of injected carbon dioxide with in situ minerals in the numerical model); and

(iii) Short-term and long-term simulations.

Such numerical modelling shall be used to provide insight into the pressure and extent of carbon dioxide in the geological storage site over time, the risk of fracturing the cap rock formation(s) and the risk of seepage. Multiple simulations shall be conducted to identify the sensitivity of the assessments to assumptions made. The simulations carried out in this step shall form the basis for risk and safety assessments, detailed in section 11.6 below;

(d) Step 4: establishment of a site development and management plan. Drawing on steps 1–3 above, the project participant shall establish a site development and management plan. The development and management plan shall address the proposed conditions of use for the geological storage site and include, inter alia, descriptions of:

(i) The preparation of the site;

(ii) Well construction, such as materials and techniques used, and the location, trajectory and depth of the well;

(iii) Injection rates and the maximum allowable near-wellbore pressure;

(iv) Operating and maintenance programmes and protocols;

(v) The timing and management of the closure phase of the proposed CCS project activity, including site closure and related activities.

165. When characterizing and selecting a geological storage site, project participants shall use a wide range of data and information, including, inter alia:

(a) Geological information, such as descriptions of the overburden and cap rock formation(s) and injection formation(s), locations of mapped faults, subsurface well and wellbore information, permeability and porosity, which are important in determining the injectivity of the injection formation, and the cap rock formation containment capacity, and information about regional tectonics, including the stress field and historical seismic activity;

(b) Geophysical information, such as the thickness and lateral extent of the storage and cap rock formation(s), pressure, temperature, the existence of faults, and reservoir heterogeneity. Sources of data may include, inter alia, well logs, sonic logs and seismic surveys;

(c) Geomechanical information, such as the stress state and the rock fracture pressure within the injection formation(s) and the cap rock formation(s). Sources of data include borehole data, such as breakouts inferred from calliper and televiewer logs, minifrac results, information about anisotropy within the reservoir, and mud loss events;

(d) Geochemical information, such as information on rock and fluid properties and mineralogy. Fluid properties, such as the brine salinity, should also be used to determine dissolution trapping rates;

(e) Hydrogeological information, such as aquifer characteristics and aquifer flow direction and rates within the geological storage site, the overburden and surrounding domains.

166. Project participants shall demonstrate that they have selected and characterized the geological storage site in accordance with the requirements referred to in paragraphs 161–165 above and provide all relevant supporting documents. Project participants shall describe and document transparently the methods, assumptions and models used, the type and sources of information and data used, as well as the process and steps taken to characterize and select the geological storage site, including the findings and outcomes from each step.

11.5. Project boundary

167. The following applies in addition to paragraphs 45 and 46 above [Project standard]: The project participants shall define the boundary of a CCS project activity to include:

(a) Where applicable, the following:

(i) The installation where the carbon dioxide is captured;

(ii) Any treatment facilities;

(iii) Transportation equipment, including pipelines and booster stations along a pipeline, or offloading facilities in the case of transportation by ship, rail or road tanker;

(iv) Any reception facilities or holding tanks at the injection site;

(v) The injection facility;

(vi) Subsurface components, including the geological storage site and all potential sources of seepage, as determined during the characterization and selection of the geological storage site;

(b) The vertical and lateral limits of the carbon dioxide geological storage site that are expected when the carbon dioxide plume stabilizes over the long term during the closure phase and the post-closure phase.

11.6. Risk and safety assessment

168. Project participants shall carry out a comprehensive risk and safety assessment in order to assess the integrity of the geological storage site and potential impacts on human health and ecosystems in proximity to the proposed CCS project activity. The risk and safety assessment shall also be used to inform environmental and socioeconomic impact assessments. The risk and safety assessment shall:

(a) Consider specific risks associated with containment failure resulting in emissions of greenhouse gases from above-ground installations and seepage from subsurface installations, and the potential effects on, inter alia:

(i) The contamination of underground sources of drinking water;

(ii) The chemical properties of seawater;

(iii) Human health and ecosystems (e.g. as a result of carbon dioxide accumulations at dangerous levels in non-turbulent air);

(b) Consider the risk of continuous slow seepage from a geological storage site. This type of event can arise due to, inter alia:

(i) Seepage along injection well(s) or abandoned well(s);

(ii) Seepage along a fault or fracture;

(iii) Seepage through the cap rock formation;

(c) Consider the risk of sudden mass release of carbon dioxide from surface CCS installations, for example due to pipeline rupture;

(d) Cover the full chain of CCS, including surrounding environments;

(e) Provide assurance of safe operational integrity regarding the containment of carbon dioxide, based on site-specific information about the geological storage site, potential seepage pathways, and secondary effects of storing carbon dioxide in the geological storage site, such as brine migration;

(f) Be used to determine operational data for the application of the site development and management plan, such as to set the appropriate maximums of injection pressure that will not compromise the confining cap rock formation(s) and the overburden of the geological storage site;

(g) Take account of the effects of potential induced seismicity or other geological impacts, as well as any other potential consequences for the environment, including on local ecosystems, property and public health, and global environmental effects on the climate directly attributable to the CCS project activity, including effects due to seepage;

(h) Be used to help prioritize locations and approaches for enhanced monitoring activities;

(i) Provide a basis for remedial measures, including plans for responses that can stop or control any unintended emissions from surface CCS installations and seepage of carbon dioxide, restore the integrity of a geological storage site, and restore long-term environmental quality significantly affected by a CCS project activity. Such measures and plans shall accompany monitoring plans;

(j) Include a communication plan.

169. In order to assess the potential risks of carbon dioxide capture, transportation and storage in a geological storage site, project participants shall take the following steps:

(a) Step 1: hazard characterization. The project participant shall analyse the following:

(i) Potential hazards resulting from the capture, transportation and injection of carbon dioxide;

(ii) Potential seepage pathways from the geological storage site;

(iii) The magnitude of potential seepage for identified potential seepage pathways;

(iv) Critical parameters affecting potential seepage, such as the maximums of injection formation pressure, injection rates and temperature;

(v) The sensitivity to various assumptions made during numerical modelling;

(vi) Any other factors which could pose a hazard to human health and the environment;

(b) Step 2: exposure assessment. The project participant shall undertake an exposure assessment based on the characteristics of surrounding populations and ecosystems, the potential fate and behaviour of any seeped carbon dioxide, and other factors;

(c) Step 3: effects assessment. The project participant shall undertake an effects assessment based on the sensitivity of species, communities or habitats linked to potential seepage events identified during the hazard characterization and the effects of elevated carbon dioxide concentrations in the atmosphere, biosphere and hydrosphere;

(d) Step 4: risk characterization. The project participant shall assess the safety and integrity of the geological storage site in the short-, medium- and long-term, including an assessment of the risk of seepage under the proposed conditions of use set out in the site development and management plan;

(e) Step 5: contingency plan for large incidents, including seepage. The project participant shall prepare all the necessary plans that are to be put in place in case of large incidents, including availability of trained personnel, materials and equipment and financial means to mitigate adverse impacts of the incident and teams prepared to act as swiftly as possible.

170. Project participants shall provide:

(a) A detailed description of the risk and safety assessment referred to in paragraphs 168 and 169 above;

(b) A copy of the communications and contingency plans referred to in paragraphs 168 and 169 above; and

(c) References to all relevant supporting documents.

11.7. Monitoring

171. Project participants shall include in the PDD provisions for monitoring the proposed CCS project activity that meet the following objectives:

(a) To provide assurance of the environmental integrity and safety of the geological storage site;

(b) To confirm that the injected carbon dioxide is contained within the geological storage site and within the project boundary;

(c) To ensure that injected carbon dioxide is behaving as predicted in order to minimize the risk of any seepage or other adverse impacts;

(d) To ensure that good site management is taking place, taking account of the proposed conditions of use set out in the site development and management plan, established in step 4 of section 11.4 above;

(e) To detect and estimate the flux rate and total mass of carbon dioxide from any seepage;

(f) To determine whether timely and appropriate remedial measures have been carried out in the event of seepage;

(g) To determine the reductions in anthropogenic emissions by sources of greenhouse gases that have occurred as a result of the registered CCS project activity.

172. In developing the monitoring plan for the proposed CCS project activity, project participants shall meet the objectives set out above by:

(a) Reflecting the principles and criteria of international good practice for the monitoring of geological storage sites and consider the range of technologies described in the relevant sections of the Intergovernmental Panel on Climate Change (IPCC) 2006 Guidelines for National Greenhouse Gas Inventories and other good practice guidance;

(b) Transparently specifying which parameters and information will be monitored and collected, and the location and frequency of application of different monitoring techniques during the operational phase, closure phase and post-closure phase;

(c) Providing for specific techniques and methods that can:

(i) Detect and estimate the quantity of the carbon dioxide stored in the geological storage site;

(ii) Detect potential seepage via pathways in the cap rock formation(s) and in the overburden and surrounding domains in the geological storage site;

(iii) Estimate the flux rate and total mass of carbon dioxide from any seepage;

(d) Including provisions for history matching, by using the monitoring results to calibrate and update the numerical models that were used to characterize the geological storage site;

(e) Providing for measurement of the carbon dioxide stream and composition, including impurities, at various points in the carbon dioxide capture, transportation and storage chain, including at the point(s) of injection into the geological storage site, at an appropriate frequency;

(f) Providing for measurement of the temperature and pressure at the top and bottom of the injection well(s) and observation well(s), at an appropriate frequency;

(g) Providing for the monitoring and measurement of various geological, geochemical and geomechanical parameters, such as fluid pressures, displaced fluid characteristics, fluxes and microseismicity, at an appropriate frequency;

(h) Providing for the monitoring and measurement of relevant parameters in the overburden and surrounding domains of the geological storage site, such as the monitoring of groundwater properties, soil gas measurements and measurements of the surface concentrations of carbon dioxide in the air, which shall be calibrated to detect signs of seepage, at an appropriate frequency;

(i) Providing for the detection of corrosion or degradation of the transport and injection facilities;

(j) Providing for an assessment of the effectiveness of any remedial measures taken in the event of seepage.

173. Project participants shall, for each verification period, carry out history matching and, where necessary, update the numerical models used to characterize the geological storage site by conducting new simulations using the monitored data and information. Project participants shall adjust the numerical models if significant deviations (as defined in the approved CCS methodology used by the CCS project activity) occur between observed and predicted behaviour. The project participants shall immediately notify the host Party and the CDM Executive Board in writing if a significant deviation occurs at any stage of the project cycle.

174. Where significant deviations are observed during history matching or when requesting a renewal of the crediting period, the project participants shall, as appropriate:

(a) Recharacterize the geological storage site, in accordance with section 11.4 above;

(b) Revise the project boundary;

(c) Update the risk and safety assessment, in accordance with section 11.6 above;

(d) Update the environmental and socioeconomic impact assessments, referred to in section 11.10 below;

(e) Revise the monitoring plan, in order to improve the accuracy and/or completeness of data and information, taking into account observed deviations determined during history matching, changes to the project boundary, changes to the risk and safety assessment, changes to the environmental and socioeconomic impact assessments, new scientific knowledge and improvements in the best available technology;

(f) Update the site development and management plan, taking account of the results of the activities described in subparagraphs (a–e) above, where appropriate.

175. Where the information prepared in accordance with paragraph 174 above indicates that the geological storage site no longer meets the requirements set out in paragraphs 161 and 162 above, the issuance of CERs shall cease.

176. Project participants shall account for any seepage that occurs during the crediting period(s) of a CCS project activity as project or leakage emissions in the calculation of the monitored reductions in anthropogenic emissions by sources of greenhouse gases that have occurred as a result of the registered CDM CCS project activity. Any seepage that occurs after the end of the last crediting period shall be quantified and reported in monitoring reports.

177. The monitoring of the geological storage site shall:

(a) Begin before injection activities commence, to ensure adequate time for the collection of any required baseline data;

(b) Be conducted at an appropriate frequency during and beyond the crediting period(s) of the proposed CCS project activity;

(c) Not be terminated earlier than 20 years after the end of the last crediting period of the CDM project activity or after the issuance of CERs has ceased, whichever occurs first;

(d) Only be terminated if no seepage has been observed at any time in the past 10 years and if all available evidence from observations and modelling indicates that the stored carbon dioxide will be completely isolated from the atmosphere in the long term. This may be demonstrated through the following evidence:

(i) History matching confirms that there is agreement between the numerical modelling of the carbon dioxide plume distribution in the geological storage site and the monitored behaviour of the carbon dioxide plume;

(ii) Numerical modelling and observations confirm that no future seepage can be expected from the geological storage site.

178. The project participant(s) liable for the geological storage site, or an entity that is under contract to the project participant(s), shall conduct the monitoring of the geological storage site unless and until the transfer of liability to the host Party is effected in accordance with section 11.9 below.

11.8. Requirements for financial provision

179. Project participants shall establish a financial provision that:

(a) Meets all obligations in accordance with the laws and regulations of the host Party arising from the establishment and operation of the proposed CCS project activity;

(b) Allows for the ongoing safe operation of the geological storage site in accordance with the laws and regulations of the host Party;

(c) Addresses the risk of project participant insolvency in accordance with the laws and regulations of the host Party;

(d) Offers a means of redress for affected communities and ecosystems in the event of seepage from a geological storage site of a CCS project activity in accordance with the laws and regulations of the host Party;

(e) Enables the host Party to discharge its obligations arising in connection with the transfer of liability.

180. The financial provision shall cover:

(a) The cost of ongoing monitoring, at an appropriate frequency, of the geological storage site and of verification and certification by a DOE for at least 20 years after the end of the last crediting period of the CCS project activity or after the issuance of CERs has ceased, whichever occurs first;

(b) In the event of seepage, the cost associated with the obligations set out in section "Addressing non-permanence in CCS project activities" of the Project cycle procedure;

(c) The cost of any remedial measures required by laws and regulations of the host Party;

(d) Any other requirements determined by the host Party that are agreed at the time of the host Party approval and described in the PDD.

181. Project participants shall describe the type and amount of the financial provision and provide a detailed cost estimate for each of the requirements referred to in paragraph 180 above, including underlying assumptions and justifications.

182. The financial provision shall, in accordance with the laws and regulations of the host Party, be transferable to the host Party upon fulfilment of all obligations of the project participants in accordance with the CDM rules and requirements and the laws and regulations of the host Party, or upon insolvency of the project participant(s).

11.9. Liability

183. Project participants shall clearly document in the PDD how the liability obligations arising from the proposed CCS project activity or its geological storage site are allocated during the operational phase, closure phase and post-closure phase.

184. Relevant provisions of laws and regulations of the host Party, including those referred to in section 11.3 above, shall apply to matters related to liability.

185. During the operational phase and any time thereafter until a transfer of liability to the host Party has been effected in accordance with paragraph 186 below, liability shall reside with the project participants.

186. A transfer of liability from a project participant(s) to the host Party shall be effected after:

(a) The monitoring by the project participant of the geological storage site has been terminated in accordance with the conditions for such termination, as set out in section 11.7 above;

(b) The host Party has established that the conditions set out by the DNA in its letter of approval, referred to in section 11.3 above, and those set out in the relevant laws and regulations applicable to the geological storage site, have been complied with.

187. Project participants shall notify the Board in writing, through the relevant DNA, not less than six months before the transfer of liability is scheduled to occur.

11.10. Environmental and socioeconomic impact assessments

188. The following applies instead of paragraphs 71 and 72 above: The project participants shall carry out comprehensive environmental and socioeconomic impact assessments in accordance with the laws and regulations of the host Party, including with regard to potential transboundary impacts, drawing upon the risk and safety assessment referred to in section 11.6 above. Such assessments shall:

(a) Include a detailed description of the planned monitoring and remedial measures to address any environmental and socioeconomic impacts identified, and be compiled in accordance with procedures as required by the host Party;

(b) Analyse thoroughly and exhaustively air emissions (e.g. nitrogen oxides, sulphur oxides, dust, mercury, polycyclic aromatic hydrocarbons), solid waste generation, and water use associated with current CCS technologies;

(c) Be conducted applying the best available techniques in order to facilitate a high level of protection for the environment as a whole and for communities;

(d) Include at least a comprehensive analysis of the environmental and socioeconomic impacts including consideration of the potential impacts of carbon dioxide storage on potable water supply.

189. Project participants shall provide a detailed summary of the environmental and socioeconomic impact assessment and provide references to all relevant supporting documents.

11.11. Verification and certification

190. Project participants may select the time for the initial verification and certification of a CCS project activity by a DOE, taking into account that subsequent verification and certification reports shall be submitted by the DOE to the Executive Board not later than five years after the end of the previous verification period.

191. Verification and certification of a CCS project activity shall continue, in accordance with paragraph 187 above, beyond the end of the last crediting period by the DOE appointed by project participants and until such time as the monitoring of the geological storage site has been terminated in accordance with the conditions for the termination of monitoring, as set out in paragraph 177 above.

12. Specific design requirements for programme of activities

12.1. Selection of methodology and standardized baseline

192. In selecting an approved methodology(ies) and, where applicable, an approved standardized baseline(s), the coordinating/managing entity shall consider that any approved methodology and approved standardized baseline are applicable to CPAs under a PoA.[17]

[17] See EB 68 meeting report, paragraph 97.

12.2. Description of programme of activities

193. The coordinating/managing entity shall develop a framework for the implementation of the proposed CDM PoA and inclusion of CPAs under the PoA.

194. The coordinating/managing entity shall describe the policy/measure or stated goal that the proposed CDM PoA seeks to promote.

195. The coordinating/managing entity shall confirm that the proposed CDM PoA is a voluntary action by the coordinating/managing entity.

196. The coordinating/managing entity shall provide the identification of:

    (a) Coordinating/managing entity of the proposed CDM PoA;

    (b) Party(ies) involved in the proposed CDM PoA;

    (c) Project participants involved in the proposed CDM PoA.

197. The coordinating/managing entity shall define the boundary for the proposed CDM PoA in terms of a geographical area (e.g. municipality, region within a country, country or several countries) within which all CPAs to be included in the PoA will be implemented, taking into consideration that all applicable national and/or sectoral policies and regulations within the chosen boundary are reflected in the establishment of the baseline.

198. As part of the proposed CDM PoA, the coordinating/managing entity shall prepare generic CPA-DDs with generic information applicable to all CPAs that will be included in the PoA. For PoAs applying more than one technology/measure or more than one methodology, the coordinating/managing entity shall prepare a generic CPA for each technology/measure, each methodology and each combination thereof.[18]

199. Also as part of the proposed CDM PoA, the coordinating/managing entity shall develop specific-case CPAs[19] under the PoA as follows:

    (a) For PoAs applying the same technology/measure under the same methodology across all CPAs, only one specific-case CPA-DD shall be provided;

[18] For instance a PoA for efficient residential lighting applying more than one methodology will need more than one generic CPA-DD (e.g. a generic CPA-DD for efficient residential lighting under AMS-II.C and a generic CPA-DD for efficient residential lighting under AMS-II.J). Similarly a PoA for energy efficiency activities applying a single methodology but including different technologies will need more than one generic CPA-DD (e.g. a generic CPA-DD for efficient street lighting under AMS-II.C and a generic CPA-DD for efficient water pumping under AMS-II.C). Furthermore, a PoA for treatment of domestic manure would need more than one generic CPA-DD for applying more than one combination of methodologies (e.g. a generic CPA-DD for applying the combination AMS-III.R.+AMS-I.E.+AMS-I.I. and a generic CPA-DD for applying the combination AMS-III.R.+AMS-I.I). However, separate generic CPA-DDs are not required to cover cases that do not differ in terms of emission reduction calculations (e.g. separate generic CPA-DDs are not required for installing prefabricated project stoves of efficiency N under methodology AMS-II.G by manufacturer M1 versus installing prefabricated project stoves of efficiency N under methodology AMS-II.G by manufacturer M2).

[19] Also referred to as actual case or real case CPA-DD.

(b) For PoAs applying more than one technology/measure or more than one methodology, one specific-case CPA-DD for each generic CPA-DD shall be provided. In cases where not all specific-case CPA-DDs to cover all generic CPA-DDs can be provided at the time of the publication of the PoA-DD for global stakeholder consultation, at least one specific-case CPA-DD corresponding to any of the generic CPA-DDs shall be provided at the time of the publication of the PoA-DD for global stakeholder consultation. In this case, one specific-case CPA-DD shall be provided for each of the remaining generic CPA-DDs at the time of request for registration of the PoA or after the registration of the PoA. In the latter case, the specific-case CPA-DD shall be provided for approval by the Board in accordance with the post-registration change process as defined in the Project cycle procedure.

(c) For PoAs hosted in more than one Party, one specific-case CPA-DD for each host Party shall be provided at the time of the publication of the PoA-DD for global stakeholder consultation. In this case, if the PoA-DD defines more than one generic CPA-DD, the specific-case CPA-DD for a host Party may correspond to any generic CPA-DD. However, the requirements in subparagraph (b) above shall still apply to the PoA as a whole.

200. The coordinating/managing entity shall establish and implement, and provide a description of, the operational and management arrangements for the implementation of the proposed CDM PoA. These arrangements may be integrated with the management system required in the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities".

12.3. Description of component project activities

201. Each CPA shall have only one host Party.

202. The coordinating/managing entity shall provide the geographic reference or other means of identification[20] of the CPAs.

203. The coordinating/managing entity shall describe the CPAs, including the technology(ies) and/or measures to be used, to enable the identification of the project's scale and type, demonstration of additionality, application of the selected methodology(ies) and, where applicable, of the selected standardized baseline(s) and calculations of GHG emission reductions or net GHG removals.

204. The coordinating/managing entity shall identify:

(a) The entity/individual responsible for the operation of the CPAs (name and contact details);

(b) The host Party of the CPAs.

205. The coordinating/managing entity shall confirm that the CPA is neither registered as a CDM project activity nor included in another registered PoA.

[20] For example: the geographic reference for stationary CPAs; the registration number or GPS devices for mobile CPAs.

12.4. Eligibility criteria

206. The coordinating/managing entity shall define in the proposed CDM PoA the eligibility criteria for inclusion of a CPA under the PoA, in accordance with the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities".

12.5. Application of selected baseline and monitoring methodologies and selected standardized baselines

12.5.1. General requirements

207. The coordinating/managing entity applying combinations of technologies/measures and/or approved CDM methodologies among CPAs of a PoA shall apply the combinations in accordance with the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities" and the Project cycle procedure.

12.5.2. Demonstration of additionality

208. The following applies instead of paragraphs 54 and 57 above: The coordinating/managing entity shall demonstrate that the proposed CDM PoA is additional in accordance with the "Standard for demonstration of additionality, development of eligibility criteria and application of multiple methodologies for programme of activities".

209. The coordinating/managing entity shall consider that a full additionality assessment is not required in the context of CPA. Instead, the confirmation of additionality for CPAs should be conducted by means of the eligibility criteria.

12.5.3. Sampling

210. If the coordinating/managing entity utilizes sampling for the determination of parameter values for calculating GHG emission reductions, the coordinating/managing entity shall develop and describe the sampling plan in accordance with the "Standard for sampling and surveys for CDM project activities and programme of activities".

12.5.4. Monitoring plan

211. The coordinating/managing entity shall develop and provide a description of the monitoring plan for a CPA and identify the monitoring provisions and data parameters that a CPA has to apply/monitor in accordance with the selected methodology and, where applicable, the selected standardized baseline.

12.6. Debundling of small-scale component project activities

212. The coordinating/managing entity shall demonstrate that the proposed small-scale CPA is not a debundled component of a large-scale activity, in accordance with the applicable provisions of the "Guidelines on assessment of debundling for SSC project activities".

12.7. Duration and crediting period

12.7.1. Duration of programme of activities and component project activities

213. The following applies instead of paragraphs 65–66 above: The coordinating/managing entity shall determine the start date of the proposed CDM PoA and provide a description of how the start date has been determined. The start date of a PoA shall be either of the two dates below:

    (a) The date of notification of the intention to seek the CDM status by the coordinating/managing entity to the secretariat and the DNA; or

    (b) The date of publication of the PoA-DD for global stakeholder consultation.

214. The coordinating/managing entity shall specify the duration of the proposed CDM PoA, which shall not exceed 28 years (60 years for an A/R PoA), counting from the start date of the PoA.

215. The coordinating/managing entity shall determine the start date and expected operational lifetime of any proposed CPA and provide a description of how the start date has been determined. The start date of a CPA is the earliest date at which either the implementation or construction or real action of the CPA begins.

216. The coordinating/managing entity shall confirm that the start date of any proposed CPA is on or after the start date of the PoA.[21]

12.7.2. Crediting period

217. Paragraphs 218-222 below apply instead of paragraphs 67–70 above.

218. The coordinating/managing entity shall renew the PoA every seven years (every 20 years for an A/R PoA) counting from the date of its registration.

219. The coordinating/managing entity shall select the type (fixed or renewable) and duration of the crediting period of a proposed CPA, considering that the start date of the crediting period of a CPA shall be on or after:[22]

    (a) The date of registration of the PoA, if the corresponding CPA DD is submitted together with the request for registration;

    (b) The date of approval of the corresponding specific case CPA DD, if the specific case CPA-DD is submitted for approval by the Board in accordance with paragraph 199(b) above;

    (c) The date when the CPA was included in accordance with the Project cycle procedure.

[21] Exceptions indicated for A/R project activities under paragraph 136(c) also apply to A/R CPAs, i.e. any A/R project activity that started after 1 January 2000, but has not been registered as a CDM project activity may be included as a CPA in an A/R PoA after 31 December 2005 as long as the first verification of the A/R CPA occurs after the date of inclusion of this CPA, and the A/R CPA can accrue temporary certified emission reductions (tCERs) or long-term certified emission reductions (lCERs) as of the starting date.

[22] See footnote 20 above.

220. The coordinating/managing entity shall select the type (fixed or renewable) and duration of the crediting period of a proposed CPA, considering that:

    (a) If a renewable crediting period type is chosen for a CPA, each renewable crediting period shall be at most seven years (20 years for an A/R CPA) and may be renewed at most two times, for a maximum total length of 21 years (60 years for an A/R CPA). The first renewal of the crediting period of the CPA shall be conducted no later than seven years after the start date of the crediting period of the CPA;

    (b) A fixed crediting period shall be at most 10 years;

    (c) The duration of the crediting period of a CPA shall not exceed the duration of the PoA, regardless of the crediting period type (renewable or fixed) of the CPA;

    (d) Where lCERs are expected to be issued for a PoA, the dates of renewal of the crediting periods of all CPAs included in the PoA are to be aligned with the date of renewal of the PoA.

221. The coordinating/managing entity shall determine only one start date for the crediting period of the proposed CDM CPA, even in cases of phased implementation of the CPA.

222. The coordinating/managing entity shall state the start date of the crediting period of the proposed CDM CPA in the format dd/mm/yyyy, and shall not use any qualifications to the start date, such as “expected”.

12.8. Environmental impacts

223. The analysis of the environmental impacts and the environmental impact assessment, as per sections 7.4, 8.7and/or 9.7 above, may be carried out for the whole PoA or at the CPA level. The coordinating/managing entity shall reflect and describe the level applied.

12.9. Local stakeholder consultation

224. The local stakeholder consultation, as per section 7.5 above, may be carried out for the whole PoA or at the CPA level. The coordinating/managing entity shall specify the level of consultation applied.

225. For the actual CPA part of the proposed CDM PoA, the local stakeholder consultation shall be completed before submission of the PoA for validation. For CPAs to be included in the registered PoA, the local stakeholder consultation shall be completed before inclusion in the PoA.

12.10. Approval and authorization

226. Paragraphs 227–232 below apply instead of paragraphs 78–79 above.

227. The coordinating/managing entity shall obtain a letter of approval from the DNA of each Party involved in the proposed CDM PoA at the time of request for registration of the PoA, confirming that:

    (a) The Party is a Party to the Kyoto Protocol; and

    (b) Participation in the proposed CDM PoA is voluntary.

228. A new host Party(ies) may be added after the registration of the PoA. In this case, the coordinating/managing entity shall request for approval by the Board of the addition in accordance with paragraph 299 below, and following the post-registration change process as defined in the Project cycle procedure.

229. In addition to the requirement in paragraph 227, for the coordinating/managing entity from the host Party, the letter of approval shall also confirm that the proposed CDM PoA assists the host Party in achieving sustainable development.

230. The coordinating/managing entity shall obtain from each host Party a letter of authorization of its coordination of the proposed CDM PoA.

231. Each project participant shall be authorized to participate in the proposed CDM PoA by at least one Party involved in the proposed PoA.

232. The operators of individual CPAs are not required to be project participants. CDM project participation is only recorded at the PoA level.

12.11. Modalities of communications

233. The following applies instead of paragraph 80(e) above: For a proposed CDM PoA, the MoC statement shall be signed only by an authorized signatory of the coordinating/managing entity.

12.12. Validation

234. Paragraphs 235–240 below apply instead of paragraphs 81–85 above.

235. A coordinating/managing entity wishing to submit a CDM PoA for validation shall complete a PoA-DD using the latest version of the CDM-PoA-DD form applicable to the PoA, taking into account the grace period of the form if it has been revised.

236. Along with the PoA-DD for the proposed CDM PoA, the coordinating/managing entity shall complete the relevant CPA-DDs in accordance with paragraph 199 above, using the latest version of the CPA-DD form applicable to the CPAs, and taking into account the grace period of the form if it has been revised.

237. When completing the PoA-DD form and the CPA-DD form, the coordinating/managing entity should follow the applicable guidelines for completing the corresponding forms.

238. When completing a PoA-DD and a CPA-DD, the coordinating/managing entity shall provide all necessary information and documentation to demonstrate the compliance of the proposed CDM PoA and CPA with all applicable requirements in this Standard and other CDM rules and requirements.

239. The coordinating/managing entity and/or project participants shall select a DOE for the validation of the proposed CDM PoA and CPA that is accredited for the validation function and sectoral scopes(s) of the PoA. The coordinating/managing entity and/or project participants shall have a contractual arrangement with the DOE for the validation.

240. The coordinating/managing entity shall submit to the selected DOE for validation the completed PoA-DD, the generic CPA-DD and the completed CPA-DD.

12.13. Inclusion of component project activities in programme of activities

241. A coordinating/managing entity may include a CPA in a registered CDM PoA at any time during the duration of the PoA provided that the requirements in paragraphs 242–243 below are met.

242. To include a CPA in a registered CDM PoA, the coordinating/managing entity shall ensure that the proposed CPA meets all applicable requirements, including the eligibility criteria for inclusion of a CPA under the PoA.

243. The coordinating/managing entity shall then submit to a DOE a completed CPA-DD specific to the proposed CPA demonstrating compliance of the CPA with all applicable requirements.

13. Implementation and monitoring requirements for all project types

13.1. General requirements

244. Project participants shall implement the registered CDM project activity in accordance with the description in the registered PDD including all physical features.

245. Project participants shall operate the registered CDM project activity in accordance with the description in the registered PDD.

246. Project participants shall monitor the registered CDM project activity and its GHG emission reductions or net GHG removals in accordance with the monitoring plan as described in the registered PDD (hereinafter referred to as the registered monitoring plan).

13.2. General description

247. Project participants shall provide the following information regarding the implemented registered CDM project activity:

(a) Title and number;

(b) Project participants involved;

(c) Location;

(d) Reference of applied methodology(ies), tool(s) and, where applicable, standardized baseline(s);

(e) Type, duration and start date of the crediting period;

(f) Number and date of the monitoring period.

13.3. Description of implemented registered project activity

248. Project participants shall provide a description of the implemented registered CDM project activity as follows:

(a) Description of the installed technology, technical processes and equipments;

(b) Information on the implementation and actual operation of the project activity, including relevant dates (e.g. construction, commissioning, continued operation periods, etc.). For project activities that consist of more than one site, project participants shall describe the status of implementation and start date of operation for each site. For project activities with phased implementation, project participants shall indicate the progress of the project activity achieved in each phase;

(c) Description of:

(i) The events or situations that occurred during the monitoring period that may impact the applicability of the applied methodology and, where applicable, the applied standardized baseline;

(ii) How the issues resulting from these events or situations have been addressed.

249. Project participants shall indicate whether any request for prior approval by the Board of changes to the registered CDM project activity has been submitted, in accordance with the Project cycle procedure, and, if applicable, the date of approval.

13.4. Description of monitoring system

250. Project participants shall describe the monitoring system and provide line diagrams (graphical schemes) showing all relevant monitoring points. This description may include data collection procedures (information flow including data generation, aggregation, recording, calculations and reporting), organizational structure, roles and responsibilities of personnel, and emergency procedures for the monitoring system.

13.5. Data and parameters

251. Project participants shall provide all parameters used to calculate baseline, project, and leakage GHG emissions by sources or GHG removals by sinks as well as other relevant parameters required by the applied methodology, the registered monitoring plan for the monitoring period and, where applicable, the applied standardized baseline. Project participants shall provide information on how data and parameters have been monitored.

252. For each parameter, project participants shall:

(a) Provide the values of the monitored parameter for the purpose of calculating GHG emission reductions or net GHG removals. Where data are measured continuously, they shall be presented using an appropriate time interval (e.g. monthly for a monitoring period of six months or more; weekly if the monitoring period is less than six months; daily if the monitoring period is one month or less). For default values (such as an IPCC value), where it is ex post confirmed, the most recent value shall be applied;

(b) Describe the equipment used to monitor each parameter, including details on accuracy class, and calibration information (frequency, date of calibration and validity), if applicable as per monitoring plan;

(c) Describe how the parameters are measured/calculated and the measurement and recording frequency;

(d) Provide and/or identify the source of data (e.g. logbooks, daily records, surveys, etc.);

(e) Provide the calculation method of the parameter, where relevant;

(f) Describe the QA/QC procedures applied (if applicable per monitoring plan);

(g) Provide information about appropriate emission factors, IPCC default values and any other reference values that have been used in the calculation of GHG emission reductions or net GHG removals.

253. Project participants shall indicate whether any request for temporary deviations or permanent changes from the registered monitoring plan, applied methodology or applied standardized baseline has been submitted, in accordance with the Project cycle procedure, and, if applicable, include the date of approval.

254. For a registered CDM project activity using an approved standardized baseline that standardizes baseline emissions, project participants shall apply, in the first monitoring report of the first crediting period, the version of the applied standardized baseline that contains more conservative standardized value(s)[23] of the parameter(s) (e.g. emission factors) between the latest version[24] applicable at the first day of the first monitoring period and the latest version applicable at the last day of the first monitoring period.[25] In the subsequent monitoring reports for the first crediting period, project participants shall apply:

(a) The same version as the one applied in the first monitoring report, where the registered CDM project activity applies:

(i) An approved constant standardized baseline that standardizes baseline emissions and that does not require an ex post application of the standardized values; or

[23] A more conservative value(s) provides lower baseline emissions. However, if a standardized parameter(s) (e.g. the grid emission factors) as an approved standardized baseline is(are) also used for the purpose of determining the project emissions and/or leakage emissions, a more conservative value(s) provides lower emission reductions.

[24] The latest version of the applied standardized baseline(s), referred to in paragraphs 254 and 255, does not refer to the previous version(s) that is(are) still valid after a major and/or minor revision(s) in accordance with the "Procedure: Development, revision, clarification and update of standardized baselines" but refers to the latest version only.

[25] See EB 70 meeting report, paragraph 45(c). For example, if version 01.0 is the latest version of the applied standardized baseline at the first day of the first monitoring period while version 02.0 is the latest version at the last day of the first monitoring period and contains more conservative values, version 02.0 applies to the first monitoring report. However, if version 0.10 is the latest version both at the first and last days of the first monitoring period, then version 01.0 applies to the first monitoring report.

(ii) An approved dynamic standardized baseline[26] that standardizes baseline emissions; or

(b) The latest version applicable at the first day of each monitoring period, where the registered CDM project activity applies an approved constant standardized baseline that standardizes baseline emissions and that requires an ex post application of the standardized values.[27]

255. For a registered CDM project activity using an approved standardized baseline that standardizes baseline emissions, if the selected type of crediting period is renewable, project participants shall apply, in the first monitoring report for the second or third crediting period, the version of the applied standardized baseline that contains more conservative standardized value(s) of the parameter(s) (e.g. emission factors) between the latest version applicable on the submission date of the notification of their intention to request a renewal of the crediting period and the latest version applicable on the first day of the first monitoring period in the new crediting period.[28] In the subsequent monitoring reports for the second or third crediting period, project participants shall apply:

(a) The same version as the one applied in the first monitoring report of the respective crediting period, where the registered CDM project activity applies:

(i) An approved constant standardized baseline that standardizes baseline emissions and that does not require an ex post application of the standardized values; or

(ii) An approved dynamic standardized baseline that standardizes baseline emissions; or

(b) The latest version applicable at the first day of each monitoring period, where the registered CDM project activity applies an approved constant standardized baseline that standardizes baseline emissions and that requires an ex post application of the standardized values.

13.6. Calculation of emission reductions or net removals

256. Project participants shall identify the formulae used and provide the calculations of the following for the monitoring period of the registered CDM project activity:

(a) Baseline GHG emissions or baseline net GHG removals;

[26] See EB70 meeting report, paragraph 45(f). A “constant standardized baseline” refers to a standardized baseline without a dynamic factor(s) such as approved standardized baselines ASB0001, ASB0002, ASB0003 and ASB0004. On the other hand, a “dynamic standardized baseline” refers to a standardized baseline with a dynamic factor(s) (e.g. autonomous improvement factors). For example, one option in the calculation of baseline emissions in the approved methodology AM0070 requires that a specific electricity consumption of a certain class and design of refrigerators be reduced annually by a fixed percentage of autonomous improvement factors. Therefore, a standardized baseline developed using the methodological approach of AM0070 can be a dynamic standardized baseline.

[27] This refers to an approved standardized baseline that requires project participants to use the latest standardized value(s) of baseline emission parameter(s) in the latest version of the standardized baseline for the monitoring reports subsequent to the first monitoring report.

[28] See EB 70 meeting report, paragraph 45(d).

(b) Project GHG emissions or actual net GHG removals;

(c) Leakage GHG emissions;

(d) GHG emission reductions or net anthropogenic GHG removals.

257. Project participants shall provide a comparison of actual GHG emission reductions or net anthropogenic removal of the registered CDM project activity with estimates in the registered PDD.

258. For any registered CDM project activity, except A/R project activities, project participants shall explain the cause of any increase in the actual GHG emission reductions achieved during the current monitoring period (e.g. higher water availability, higher plant load factor, etc.), including all information (i.e. data and/or parameters) that is different from that stated in the registered PDD.

13.7. Verification of implemented registered project activity and monitored emission reductions or net removals

259. Project participants wishing to report, for verification and certification, on the GHG emission reductions or net GHG removals of the implemented registered CDM project activity shall prepare a monitoring report for the relevant monitoring period using the latest version of the monitoring report form applicable to the project activity, taking into account the grace period of the form if it has been revised.

260. When completing a monitoring report form, project participants shall provide all necessary information and documentation to demonstrate compliance of the implemented registered CDM project activity and monitored GHG emission reductions or net GHG removals with all applicable requirements in this Standard and other applicable CDM rules and requirements.

261. When completing a monitoring report form, project participants should follow the instructions for filling out the monitoring report form (CDM-MR-FORM) attached to the CDM-MR-FORM.

262. Project participants shall select a DOE for the verification of the implemented registered CDM project activity and monitored GHG emission reductions or net GHG removals for the relevant monitoring period that is accredited for the verification function and sectoral scope(s) of the project activity. Project participants shall have a contractual arrangement with the DOE for the verification.

263. Project participants shall submit the completed monitoring report of the implemented registered CDM project activity for the relevant monitoring period, together with supporting documentation, to the selected DOE for verification.

264. If the DOE's verification of the implemented registered CDM project activity's monitoring report has been selected by the secretariat as a performance assessment under the "Procedure for accrediting operational entities by the Executive Board of the clean development mechanism (CDM)", project participants shall facilitate access to the project site for the CDM assessment team.

13.8. Post registration changes

13.8.1. General requirements

265. Project participants shall identify and document any actual or proposed changes to the operation, implementation and/or monitoring of the registered CDM project activity taking into account the types of changes described in appendix 1, which describes the types of changes that do not require prior approval by the Board.

266. If there is any change regarding the modalities or information in the MoC statement or its annexes after a request for registration has been submitted, project participants shall revise the MoC statement in accordance with the Project cycle procedure.

267. Project participants shall ensure that any DOE referred to in paragraphs 269, 272, 276, 278 and 285 below is accredited for the validation function and sectoral scope(s) of the registered CDM project activity.

13.8.2. Temporary deviations from the registered monitoring plan, applied methodology or applied standardized baseline

268. If project participants are temporarily unable to monitor the registered CDM project activity in accordance with the registered monitoring plan, the applied methodology or the applied standardized baseline, project participants shall describe the nature, extent and duration of the non-conforming monitoring and the proposed alternative monitoring of the project activity in the monitoring report.

269. In such cases, project participants shall either:

(a) Inform the DOE contracted to perform a verification for the monitoring period during which they were unable to monitor the registered CDM project activity in accordance with the registered monitoring plan, the applied methodology or the applied standardized baseline; or

(b) Request any DOE at any time prior to the commencement of verification of a monitoring period to assess the proposed alternative monitoring of the project activity.

270. Project participants shall apply conservative assumptions or discount factors to the calculations to the extent required to ensure that GHG emission reductions will not be over-estimated as a result of the deviation.

13.8.3. Permanent changes

13.8.3.1. Corrections

271. If project participants make any corrections to project information or parameters fixed at validation as described in the registered PDD, project participants shall document these corrections in a revised PDD.

272. In such cases project participants shall either:

(a) Inform the DOE contracted to perform a verification regarding the corrections; or

(b) Request any DOE at any time prior to the commencement of verification to assess the corrections.

13.8.3.2. Changes to the start date of the crediting period

273. Project participants of a registered CDM project activity for which the start date of the crediting period was prior to the date of registration may not request any changes in the start date of the crediting period.

274. Project participants of a registered CDM project activity may not request any changes to the start date of the crediting period of more than two years – not more than four years for project activities hosted by a Least Developed Country.

275. Project participants of a registered CDM project activity are not required to request prior approval by the Board for the following changes of the start date of the crediting period, but shall notify the secretariat of the changes in accordance with the Project cycle procedure:

(a) Bringing forward the start date up to one year earlier than the one indicated in the registered PDD, taking into account that the start date shall not be earlier than the effective date of registration of the project activity;

(b) Postponing the start date by up to one year – or by up to two years for project activities hosted by a Least Developed Country – later than the one indicated in the registered PDD.

276. Where the proposed change of the start date of the crediting period of a registered CDM project activity constitutes a difference of more than one year but less than two years – more than two years but less than four years for project activities hosted by a Least Developed Country –, project participants shall:

(a) Demonstrate that no changes have occurred to the project activity that would result in a less conservative baseline, and that substantive progress has been made by the project participants to start the project activity;

(b) Submit this demonstration to a DOE for assessment prior to making a request for approval by the Board in accordance with the Project cycle procedure.

13.8.3.3. Permanent changes from the registered monitoring plan, applied methodology or applied standardized baseline

277. If project participants are unable to implement the registered monitoring plan and it will not be possible to monitor the registered CDM project activity in accordance with a monitoring plan that would comply with the applied methodology, any applicable tools and, where applicable, the applied standardized baseline, project participants shall describe the nature and extent of the non-conforming monitoring in a revised PDD and the proposed alternative monitoring of the project activity (unless the registered PDD already contains this description).

278. In such cases, project participants shall either:

(a) Inform the DOE contracted to perform a verification for the monitoring period during which it was identified that the project participants are unable to implement the registered monitoring plan and it will not be possible to monitor the project

activity in accordance with a monitoring plan that would comply with the applied methodology and, where applicable, the applied standardized baseline; or

(b) Request any DOE at any time prior to the commencement of verification of a monitoring period to assess the proposed alternative monitoring of the project activity.

279. Project participants shall apply conservative assumptions or discount factors to the calculations to the extent required to ensure that GHG emission reductions will not be over-estimated as a result of the change.

13.8.3.4. Changes to the project design of a registered project activity

280. Where there are changes to the project design of a registered CDM project activity, project participants shall prepare a revised PDD which describes the nature and extent of the proposed or actual changes, including:

(a) Changes in the effective output capacity due to increased installed capacity or increased number of units, or installation of units with lower capacity or units with a technology which is less advanced than that described in the PDD;

(b) Addition of component or extension of technology;

(c) Removal or addition of one site (or more) of a project activity registered with multiple-sites;

(d) Actual operational parameters which are within the control of project participants differing from the expected parameters;

(e) Any consequential changes to the baseline methodology and/or the standardized baseline resulting from subparagraphs (a)–(d) above, including changing or adding another baseline methodology and/or another standardized baseline or applying a baseline scenario that is more appropriate as a result of the proposed or actual modifications to the project activity.

281. Project participants shall report in the revised PDD the impacts of the proposed or actual changes to the registered CDM project activity on the following:

(a) The applicability and application of the applied methodology and, where applicable, the applied standardized baseline under which the project activity has been registered;

(b) Compliance of the monitoring plan with the applied methodology and, where applicable, the applied standardized baseline;

(c) The level of accuracy and completeness in the monitoring of the project activity;

(d) The additionality of the project activity;

(e) The scale of the project activity.

282. In cases where the proposed or actual changes affect the additionality of the registered CDM project activity, as referred to in paragraph 281(d) above, the demonstration of the impacts of changes shall be based on all original input data. In addition:

    (a) In the case of investment analysis, project participants shall only modify the key parameters in the original spreadsheet calculations affected by the proposed or actual modifications to the project activity;

    (b) In cases where only barriers have been claimed to demonstrate additionality, project participants shall demonstrate that the barriers are still valid under the new circumstances.[29]

283. The following applies to a registered CDM project activity using an approved standardized baseline that standardizes additionality instead of paragraph 282 above: In cases where the proposed or actual changes affect the additionality of the registered CDM project activity, as referred to in paragraph 281(d) above, the demonstration of the impacts of changes shall be based on the additionality criteria (e.g. positive lists of technologies) identified in the applied standardized baseline(s).

284. Where project participants cannot demonstrate compliance with the requirements of the applied methodology and, where applicable, the applied standardized baseline under which the CDM project activity has been registered, project participants shall:

    (a) Revise the PDD applying:

        (i) The latest version of the methodology and/or the standardized baseline; or

        (ii) Another methodology and/or another standardized baseline that is(are) applicable to the project activity; and

    (b) Demonstrate compliance with the requirements of the selected methodology and/or the selected standardized baseline.

285. In such cases, project participants shall either:

    (a) Submit the revised PDD, together with the monitoring report, for verification to the DOE contracted to perform a verification for a monitoring period of the relevant project activity; or

    (b) Request any DOE at any time prior to the commencement of verification of a monitoring period to validate the revised PDD.

13.9. Renewal of crediting period

286. Project participants wishing to renew the crediting period of a registered CDM project activity or PoA shall notify the secretariat of their intention in accordance with the Project cycle procedure.

[29] If a proposed or actual modification adversely impacts the additionality of the project activity, subsequent requests for issuance based on such modifications will be rejected.

13.9.1. Renewal of crediting period of project activities

287. To support a request for renewal of the crediting period of a registered CDM project activity, project participants shall update the sections of the PDD of the project activity relating to the baseline, estimated GHG emission reductions and the monitoring plan using a baseline and monitoring methodology as follows:

(a) Project participants shall use the valid version of the methodology applied in the original PDD, i.e. the version that is valid at the time of submission of the revised PDD for the renewal of the crediting period;

(b) If the methodology applied in the original PDD was withdrawn after the registration of the project activity and replaced by a consolidated methodology, project participants shall use the valid version of the respective consolidated methodology, i.e. the version that is valid at the time of submission of the revised PDD for the renewal of the crediting period; or

(c) If the registered project activity does not meet the applicability criteria of the options provided for in subparagraphs (a) or (b) above, due to their revision or due to the update of the baseline, project participants shall either:

(i) Select another applicable methodology; or

(ii) Request, through the DOE, a deviation from a methodology for the purpose of renewal of the crediting period.

288. In updating the PDD of the registered CDM project activity in accordance with paragraph 287 above, project participants shall consider the application of an approved standardized baseline to the project activity as follows:

(a) Project participants shall use the valid version of an approved standardized baseline if:

(i) An approved standardized baseline is applied in the original PDD and the valid version of the standardized baseline is applicable to the project activity and to the methodology applied in accordance with paragraph 287 above; or

(ii) An approved standardized baseline is not applied in the original PDD but the valid version of an approved standardized baseline whose selection is mandatory[30] is applicable to the project activity and to the methodology applied in accordance with paragraph 287 above;

(b) If the valid version of the standardized baseline applied in the original PDD is no longer applicable to the project activity and/or to the valid version of the methodology applied in the original PDD due to a revision of the standardized baseline after the registration of the project activity, project participants shall:

(i) Select another applicable approved standardized baseline; or

(ii) Use only the valid version of the methodology that is applied in the original PDD, that is still applicable to the project activity and that can be used

[30] For an explanation on the standardized baseline whose selection is mandatory, see footnote 4 above.

independently for estimating emission reductions without using the standardized baseline applied in the original PDD;

(c) Project participants may use the valid version of an applicable approved standardized baseline if:

(i) An approved standardized baseline is not applied in the original PDD;

(ii) The valid version of an approved standardized baseline that standardizes baseline emissions only and does not require mandatory selection is applicable to the project activity and to the methodology applied in accordance with paragraph 287 above;

(d) Project participants shall not use an applicable approved standardized baseline if:

(i) An approved standardized baseline is not applied in the original PDD;

(ii) The valid version of an approved standardized baseline that standardizes additionality and/or the baseline scenario and does not require mandatory selection is applicable to the project activity and to the methodology applied in accordance with paragraph 287 above; or

(e) If the updated PDD has been submitted for the notification of the intention to request a renewal of crediting period when no applicable approved standardized baseline was valid, and if after the submission of the updated PDD for the notification of the intention to request a renewal of crediting period but before the submission of a request for renewal of crediting period, an applicable approved standardized baseline whose selection is mandatory has become valid, the request for renewal of crediting period may be submitted without selecting the standardized baseline within 240 days after the standardized baseline became valid.

289. To demonstrate the validity of the original baseline or its update, project participants are not required to re-assess the baseline scenario. Instead, project participants shall assess the GHG emission reductions that would have resulted from that scenario.

290. Project participants shall assess and incorporate the impact of national and/or sectoral policies and circumstances existing at the time of requesting renewal of the crediting period on the current baseline GHG emissions, without reassessing the baseline scenario.

291. The requirements contained in paragraph 290 above are not applicable to a registered CDM project activity using the valid version of an applicable approved standardized baseline that standardizes the baseline scenario in accordance with paragraph 288 above.

292. Where data and parameters used for determining GHG emission reductions that are determined ex ante (and not monitored during the crediting period) are no longer valid, project participants shall update such data and parameters in accordance with the “Tool to assess the validity of the original/current baseline and to update the baseline at the renewal of a crediting period”.

293. Project participants shall engage a DOE to undertake a validation of the updated PDD of the registered CDM project activity.

13.9.2. Renewal of crediting period of programme of activities

294. To support a request for renewal of the crediting period of a registered CDM PoA, the coordinating/managing entity shall comply with the requirements in paragraphs 287–293 above, with the following exceptions:

    (a) Update the eligibility criteria for inclusion of CPAs in the PoA as per the latest applicable version of methodology(ies) and, where applicable, standardized baseline(s) and include them in new versions of PoA-DD and generic CPA-DD;

    (b) Instead of preparing a revised version of the PDD, the coordinating/managing entity shall prepare:

        (i) A new completed PoA-DD;

        (ii) A new version of the generic CPA-DD;

    (c) If the version of the PoA has been revised in accordance with the Project cycle procedure, because the applied methodology and/or the standardized baseline has(have) been revised or replaced after having been placed on hold or withdrawn, the renewal shall occur seven years (or 20 years for A/R project activities) after the approval of the revised version(s) of the methodology and/or the standardized baseline.

295. The result of the process presented in paragraph 294 above defines a new version of the PoA-DD and the generic CPA-DD.

296. The coordinating/managing entity shall engage a DOE to undertake a validation of the new version of the PoA-DD and the generic CPA-DD.

297. To renew the crediting period of a CPA, the coordinating/managing entity shall submit to a DOE, after having ensured that the CPA meets all requirements and eligibility criteria, the completed latest version of the generic CPA-DD.

13.10. Specific requirements for programme of activities

13.10.1. Monitoring reports

298. The coordinating/managing entity shall:

    (a) Maintain all monitoring results of all CPAs in accordance with the record keeping system identified in the registered PoA-DD;

    (b) Prepare, for each monitoring period, either a single monitoring report or two separate monitoring reports, whereby:

        (i) In the case of a single monitoring report, the report shall contain all monitoring results of all CPAs included in the PoA;

        (ii) In the case of two separate monitoring reports, each CPA shall only be included in one of the two monitoring reports and the two monitoring reports

shall together contain all monitoring results of all CPAs included in the PoA (i.e. the two monitoring reports shall contain two mutually exclusive batches of CPAs);

(c) Request the issuance of CERs, tCERs or lCERs, through a DOE, as follows:

(i) In a single request, if only one monitoring report has been published covering all CPAs except for the case in paragraph 298 (c)(ii) below; or

(ii) In two separate requests, if originally one monitoring report was published, but during the course of verification the CME decided to separate the monitoring results into two monitoring reports. In this case, two separate monitoring reports shall be prepared and submitted;

(iii) In two separate requests, if two separate monitoring reports are prepared by the CME;

(d) Separate the monitoring results of individual CPAs and group the monitoring results by CPA type defined by the relevant generic CPA-DD;

(e) Make available the monitoring report and all monitoring results requested by a DOE for verification purposes.

13.10.2. Changes in programme of activities

299. The coordinating/managing entity may request changes to the registered PoA and/or the CPAs of the registered PoA under the conditions specified by the Project cycle procedure. In such cases coordinating/managing entity shall prepare the required documentation in accordance with the Project cycle procedure.

13.10.3. Changes of coordinating/managing entity

300. If the coordinating/managing entity of a registered CDM PoA changes after the registration of the PoA, the new coordinating/managing entity shall:

(a) Obtain a new letter of authorization from each host Party stating the change and confirming the authorization of coordination of the new coordinating/managing entity of the PoA;

(b) Provide a confirmation that the registered PoA will be developed and implemented with the same framework as described in the registered PoA-DD;

(c) Demonstrate compliance with requirements related to the operational and management arrangements described in paragraph 200 above;

301. The new coordinating/managing entity shall submit the documentation referred to in paragraph 300 above to a DOE for validation.

Appendix 1. Changes that do not require prior approval by the board

1. Corrections

1. Any corrections to project information[1] of a registered CDM project activity that do not affect the design of the project activity do not require prior approval by the Board.

2. Temporary deviations from the registered monitoring plan, applied methodology or applied standardized baseline

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, applied methodology or applied standardized baseline

4. If the monitoring equipment actually installed has a lower accuracy level than the one stipulated in the applied methodology, where applicable, the applied standardized baseline and/or 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, where applicable, the applied standardized baseline and/or the registered monitoring plan is deducted from the measured value;[2]

    (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, where applicable, the applied

[1] Such corrections may include typographical errors, location, names and numbers of components, etc.

[2] For example, if the accuracy level required by the monitoring plan is 0.2s and the accuracy level of the installed equipment is 0.5s, the measured value shall be adjusted as follows: adjusted value = measured value - measured value * 0.003.

standardized baseline and/or the registered monitoring plan is added to the measured value.[3]

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. Changes to the project design of a registered project activity

6. Proposed or actual changes to the project design of a registered CDM project activity that do not adversely impact any of the following do not require prior approval by the Board:

   (a) The applicability and application of the applied methodology and, where applicable, the applied standardized baseline under which the project activity has been registered;

   (b) The additionality of the project activity;

   (c) The scale of the project activity.

5. Types of changes specific to afforestation or reforestation project activities

7. Types of changes listed in the "Guidelines on accounting of specified types of changes in A/R CDM project activities from the description in registered project design document" do not require prior approval by the Board.

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[3] For example, if the accuracy level required by the monitoring plan is 0.2s and the accuracy level of the installed equipment is 0.5s, the measured value shall be adjusted as follows: adjusted value = measured value + measured value * 0.003.

Document information

Version	*Date*	*Description*
07.0	1 June 2014	EB 79, Annex 3 The document title changed from "*Clean development mechanism project standard*" to "*CDM project standard*". Revision also includes provisions on standardized baselines and batched issuance requests for a PoA.
06.0	11 April 2014	Revision to incorporate the amendment to the requirements for carbon dioxide capture and storage in CDM-EB78-A03.
05.0	4 October 2013	Revision to incorporate the amendment to the requirements for programme of activities in CDM-EB75-A04 which includes: • To enable two issuance requests for the same monitoring period.
04.0	29 July 2013	Revision to incorporate the amendment in CDM-EB74-A03 which includes: • Integration of clarification in paragraph 48(a) of the meeting report of the seventy-third meeting of the Board; • Integration of clarification CDM-EB73-A16-CLAR; • An option for proposing changes to CPAs of a registered PoA.
03.0	12 April 2013	Revision to paragraphs 24 and 25 to align with relevant provisions in the "Procedure: Development, revision and clarification of baseline and monitoring methodologies and methodological tools" (CDM-EB70-A36-PROC) to allow project participants to, through a DOE or directly, submit to the secretariat a request for revision or a request for clarification for any type of methodologies or methodological tools.
02.1	3 December 2012	Updated to include footnote numbers 18 and 19 and editorial changes to paragraphs 144(b) and 163(b) and footnote 15.
02.0	23 November 2012	EB 70, Annex 2 Revision to reflect revised requirements for PoAs.
01.0	25 November 2011	EB 65, Annex 5 Initial adoption. This document, along with the "Clean development mechanism validation and verification standard" and the "Clean development mechanism project cycle procedure", supersedes and replaces the following documents on the date when these three documents above enter into force: • Clean development mechanism validation and verification manual (version 01.2) • Procedures for requesting post-registration changes to the start date of the crediting period (version 02.0)

Version	*Date*	*Description*

- Procedures for modalities of communication between project participants and the Executive Board (version 01.0)
- Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities (version 04.1)
- Procedures for renewal of the crediting period of a registered CDM project activity (version 06.0)
- Procedures for notifying and requesting approval of changes from the project activity as described in the registered PDD (version 01.0)
- Procedures for revising monitoring plans in accordance with paragraph 57 of the modalities and procedures for the CDM (version 02.0)
- Guidelines on the demonstration and assessment of prior consideration of the CDM (version 04.0)
- Guidance related to monitoring requirements (EB23, paragraph 24)
- Guidance related to project activity with more than one component (EB28, paragraph 57)
- Guidance on application of the definition of the project boundary to A/R CDM project activities (version 01.0)
- Guidance on A/R CDM project activities starting after 1 January 2000 (prompt start) (EB 21, paragraph 64)
- Guidance on programme of activities (PoA) (EB35, paragraph 15)
- Guidelines on assessment of different types of changes from the project activity as described in the registered PDD (version 01.0)
- Guidelines for assessing compliance with the calibration frequency requirements (version 01.0)
- Clarification on elements of a written approval (version 01.0)
- Clarifications on the consideration of national and/or sectoral policies and circumstances in baseline scenarios (version 02.0)
- Clarifications on the treatment of national and/or sectoral policies and regulations (paragraph 45 (e) of the CDM Modalities and Procedures) in determining a baseline scenario (version 01.0)
- Clarifications relating to bundling of small-scale CDM project activities (EB 20, paragraphs 60-62)
- Clarification on demonstration of the eligibility of land (applicable for both large- and small-scale A/R CDM

Version	*Date*	*Description*
		project activities) (EB 38, paragraph 28) • National and/or sectoral policies and circumstances in the baseline scenario for afforestation and reforestation project activities (EB23, annex 19) • Clarification regarding the “Procedures for registration of a programme of activities as a single CDM project activity and issuance of certified emission reductions for a programme of activities (version 01.0) • Clarifications on procedures and documentation which need to be used for the renewal of a crediting period (EB 20, annex 7)
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