

CDM-EB82-AA-A15

Revision of regulatory documents due to adoption of version 08.0 of CDM project standard, validation and verification standard, and project cycle procedure

Version 01.0

DRAFT



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COVER NOTE

1. Procedural background

1. The Executive Board of the clean development mechanism (CDM) (hereinafter referred to as the Board), at its eighty-first meeting, adopted version 08.0 of the “CDM project standard” (PS), “CDM validation and verification standard” (VVS) and “CDM project cycle procedure” (PCP) to improve their consistency, clarity and usability.
2. The Board also agreed the implementation plan for version 08.0 of the PS, VVS and PCP. The plan includes revisions to affected standards, guidelines, the forms and checklists referred to in version 08.0 of the PS, VVS and PCP.

2. Purpose

3. The purpose of the revisions to the affected documents is to ensure the consistency with, and avoid duplications from, the relevant requirements in version 08.0 of the PS, VVS and PCP.

3. Key issues and proposed solutions

3.1. Revision to the general principles for bundling

4. When revising the PS and VVS to version 08.0, the provisions on the cap of emission reductions that can be claimed for small-scale (SSC) project activities and for sub-bundles of bundled SSC project activities during a particular year were modified from the cap at the estimated emission reductions in the PDD to the cap at the limit of the SSC type (PS, version 08.0, paragraph 313; VVS, version 08, paragraph 416).
5. Based on this, it is necessary to revise the corresponding provisions in the “General principles for bundling”, as contained in appendix 1 to this document, to ensure consistency with version 08.0 of the PS and VVS.

3.2. Revision to the guideline on the application of materiality in verifications

6. When revising the VVS to version 08.0, provisions of the “Guideline on the application of materiality in verifications” were moved to the VVS (section 11.2.3 and paragraph 410) as they are the basic modalities for verifications.
7. Based on this, it is necessary to remove the provisions in sections IV and V of the “Guideline on the application of materiality in verifications” to avoid duplications with the VVS. Also, the provisions of section III (Terms and definitions) of the guideline need to move to the “Glossary: CDM terms”, since the definitions that cover more than one regulatory document should belong to the glossary. These changes are reflected in appendix 2 to this document.

3.3. Amendment to the glossary of CDM terms

8. In accordance with paragraph 7 above, it is necessary to add definitions relating to the materiality concept in the “Glossary: CDM terms”, as contained in appendix 3 to this document.

4. Impacts

9. Proposed revisions made in appendices 1–3 would benefit all stakeholders, as well as the Board and the secretariat, due to improved consistency, clarity and comprehensiveness of the CDM regulatory framework.

5. Proposed work and timeline

10. It is proposed to make appendices 1–3 effective on 1 April 2015 to align with the effective date of version 08.0 of the PS, VVS and PCP.

6. Recommendations to the Board

11. The Board may wish to adopt appendices 1–3 taking into account the key issues and proposed solutions presented in section 3 above.

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Appendix 1. Draft Standard: General principles for bundling (version 03.0)

CDM-EB82-AA-A15

Draft Standard

General principles for bundling

Version 03.0

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1. Introduction

1.1. Background

1. The Executive Board of the clean development mechanism (CDM) (hereinafter referred to as the Board) adopted at its sixty-fifth meeting the “Clean development mechanism project standard” (hereinafter referred to as the Project standard) along with other regulatory documents as deliverables of objective 3(b) (“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”) of the “CDM management plan 2011”.
2. The Project standard contains requirements for project participants to comply with in designing as well as in implementing any type of CDM project activities and programme of activities (PoAs) and monitoring greenhouse gas (GHG) emission reductions by sources or GHG removals by sinks.
3. More specifically, the Project standard requires project participants to follow the “General principles for bundling” (hereinafter referred to this document) if they bring together more than one small-scale CDM project activities as a bundle.

1.2. Objectives

4. The objective of this document are to:
 - (a) Enhance consistency and clarity of provisions applicable to bundling of proposed small-scale CDM project activities, and facilitate and promote a clear and common understanding by all parties involved in the CDM;
 - (b) Improve the quality and consistency of proposed bundled small-scale CDM project activities submitted by project participants in the CDM project cycle.

2. Scope, and applicability and entry into force

2.1. Scope and applicability

5. This document provides project participants with requirements and guidance in bundling proposed small-scale CDM project activities (hereinafter referred to as project activities).

2.2. Entry into force

5_{bis}. Version 03.0 of this Standard enters into force on 1 April 2015.

2_{bis}. Normative references

5_{ter}. The following referenced documents are indispensable for the application of this standard:

- (a) “CDM project standard”;
- (b) “CDM validation and verification standard”;

(c) "CDM project cycle procedure"

(d) "Glossary of CDM terms".

3. Terms and definitions

6. In addition to the definitions contained in the "Glossary of CDM terms", the following terms are used in this document:
- (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.

4. Requirements and guidance for any bundles

- 7. Each project activity in a bundle shall comply with all applicable provisions in the Project standard.
- 8. Once a project activity becomes part of a bundle for a project cycle stage, it shall not be de-bundled for this stage. The Board may consider debundling in exceptional situations.
- 9. The composition of bundles shall not change over time (i.e. the submission of project activities to be used in a bundle shall be made at the same time. A project activity shall not be taken out of a bundle nor shall a project activity be added to the bundle after registration).
- 10. All project activities in the bundle shall have the same crediting period (i.e. the same length and start date of the crediting period).
- 11. To submit a bundle of project activities for validation, project participants shall complete the "CDM small-scale project activities bundling form" (F-CDM-SSC-BUN) and provide all necessary information and documentation to demonstrate compliance of the bundle with all applicable CDM rules and requirements.
- 12. When completing the F-CDM-SSC-BUN, project participants should follow the applicable guidelines.
- 13. ~~The sum of the size of the technology or measure utilized in the bundle~~ A sub-bundle shall not exceed the limits of each type of small-scale project activities as defined in the Project standard (type I, II or III).
- 14. It shall be demonstrated that the sub-bundle will remain under the limit of its type every year during the crediting period. The total emission reductions estimated for the crediting period shall be included in the project design document (PDD) of each project activity and further monitored.
- 15. If during its crediting period a the sub-bundle goes beyond the limits of its type, the emission reductions that can be claimed for this particular year shall be capped at the amount calculated with the limit of its type ~~maximum emission reductions estimated in the PDD of the registered project activities in the bundle for that year during the crediting period.~~

16. The letter of approval by the host Party(ies) shall indicate that the Party is aware that the project activity(ies) taking place in its territory is part of the bundle.
17. Whether a bundle of project activities is submitted with a single or multiple PDDs, it will have only one reference number for all project activities in the bundle for the issuance of certified emission reductions (CERs).
18. As an element to be part of the request for registration, project participants shall provide a written statement indicating:
 - (a) The agreement of all project participants to bundle their individual project activities;
 - (b) One project participant who shall represent all project participants to communicate with the Board, in accordance with the Project standard and the "CDM project cycle procedure".
19. A single designated operational entity (DOE) may validate the bundle of project activities.
20. For a bundle of project activities using multiple PDDs, all PDDs shall be made publicly available at the same time for public comments in the global stakeholder consultation. If the validating DOE considers that major changes are required in any of the project activities of the bundle, and that this requires the PDD(s) to be made publicly available for public comments another time, the whole bundle shall be made publicly available for public comments. The DOE shall consider the public comments for each project activity.
21. Bundled project activities shall be submitted in a single submission to the Board and pay ~~only one~~ a fee proportional to the amount of expected average annual emission reductions of the total bundle.
22. If three Board members or a Party involved in a project activity of the bundle requests the review of the project activity, all project activities in the bundle remain under review and the implications and recommendations on the review of the project activity shall lead to a decision by the Board to register or not ~~to register~~ all project activities together.
23. One verification report is adequate for the bundle of project activities, and one issuance of CERs will be made, if all applicable CDM rules and requirements are met, at the same time for the same crediting period.

5. Specific requirements and guidance for bundling of project activities of the same type, methodology and technology/measure

24. The following requirements and guidance apply to the bundling of project activities of the same type, methodology and technology/measure:
 - (a) Project participants may submit a single PDD covering all project activities in the bundle, in addition to a completed F-CDM-SSC-BUN;
 - (b) Project activities may use the same baseline under some conditions (details on these conditions will be further elaborated). In such case, project participants

should justify the same baseline by considering the particular situation for each project activity in the bundle;¹

- (c) A common monitoring plan may be utilized for all project activities in the bundle with the submission of one monitoring report, under conditions to be specified (e.g. conditions for sampling);
- (d) If different baselines are used, and project participants use a sampling approach, such approach shall address specificities of different baselines, including the proportionate representative samples of each baseline used;
- (e) If a single PDD is used for all project activities, a single verification and certification report shall be submitted by the DOE.

6. Specific requirements and guidance for bundling of project activities of different type, methodology or technology/measure

25. The following requirements and guidance apply to bundling of project activities of: (a) the same type, same methodology and different technology/measure; (b) same type, different methodologies and technologies/measures and; and (c) different types:
- (a) Project participants shall submit a single PDD for each project activity in the bundle, in addition to a completed F-CDM-SSC-BUN;
 - (b) Project activities may use the same baseline under some conditions (details on these conditions will be further elaborated);
 - (c) Separate monitoring plans are required for each project activity in the bundle and separate monitoring reports shall be prepared;
 - (d) One verification and certification report may be submitted for the bundle provided that it addresses each project activity of the bundle separately. The report shall cover the same period as the monitoring period of all project activities.

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¹ As an example, two project activities using the same technology to produce electricity but connected to different grids shall use different baselines

Document information

<i>Version</i>	<i>Date</i>	<i>Description</i>
03.0	09 February 2015	<p>Published within annex 15 to the annotated agenda of EB 82.</p> <p>Revised to:</p> <ul style="list-style-type: none"> • Ensure the consistency with the “CDM project standard (version 08.0)” (CDM-EB65-A05-STAN) and “CDM validation and verification standard (version 08.0)” (CDM-EB65-A04-STAN) on the provisions related to the cap of emission reductions that can be claimed for a sub-bundle; • Make editorial improvement.
02.0	02 March 2012	<p>EB 66, Annex 21</p> <p>Revision required to ensure consistency with the CDM Project Standard and Project Cycle Procedure as referenced in Appendix 1, Implementation plan for the CDM Project Standard, Validation and Verification Standard and Project Cycle Procedure (EB 65 report, annex 6, appendix 1)</p>
01.0	30 September 2005	Initial adoption
<p>Decision Class: Regulatory Document Type: Standard Business Function: Methodology Keywords: bundled project activities</p>		

Appendix 2. Draft Guideline: Application of materiality in verifications (version 02.0)

CDM-EB-82-AA-A15

Draft Guideline

Application of materiality in verifications

Version 02.0

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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) adopted at its seventh session decision 9/CMP.7, i.e. the “Materiality standard under the clean development mechanism” (hereinafter referred to as the CMP materiality decision).
2. In adopting its decision, the CMP decided, inter alia, that the scope of materiality under the clean development mechanism (CDM) initially covers the stage of verification by designated operational entities (DOEs).
3. In its decision, the CMP also requested the CDM Executive Board (hereinafter referred to as the Board) to increase its interaction with DOEs in order to facilitate a uniform interpretation and application of the concept of materiality with the overall view of increasing transparency and efficiency and reducing costs.
4. This document, the “Guideline on the application of materiality in verifications” (hereinafter referred to as this Guideline), addresses the CMP request described in paragraph 3 above.

1.2. Objectives

5. The objectives of this Guideline are to:
 - (a) Facilitate a uniform interpretation and application of the concept of materiality by DOEs in verifications;
 - (b) Improve transparency, consistency and efficiency in verifications and verification/certification reports submitted in the CDM project cycle.

2. Scope, and applicability and entry into force

2.1. Scope and applicability

6. This Guideline is applicable to DOEs for the verification of all types of CDM project activities.

2.2. Entry into force

^{6bis} Version 02.0 of this Guideline enters into force on 1 April 2015.

^{2bis} Normative References

^{6ter} The following referenced documents are indispensable for the application of this standard:

- (a) “CDM validation and verification standard”;
- (b) “Glossary of CDM terms”.

~~7. It is not applicable to:~~

- ~~(a) The verification of programmes of activities;~~
- ~~(b) The validation of project activities or programmes of activities;~~
- ~~(c) Uncertainties related to measurement;~~
- ~~(d) Addressing temporary deviations and permanent changes from the registered monitoring plan or applied methodology, regardless of whether corresponding emission reductions or removals are above or below materiality thresholds.[†]~~

~~3. Terms and definitions~~

~~8. In addition to the definitions contained in the “Glossary of CDM terms”, the following terms are used in this Guideline:~~

- ~~(a) “Material information” is a piece of information for which its omission, misstatement or erroneous reporting could change a decision by the Board;~~
- ~~(b) “Reasonable level of assurance” is a high, but not absolute, level of assurance;~~
- ~~(c) “Should” is used to indicate that among several possibilities, one course of action is recommended as particularly suitable;~~
- ~~(d) “May” is used to indicate what is permitted.~~

~~4. Requirements from the CMP materiality decision~~

~~9. The CMP materiality decision prescribes that a DOE planning and conducting a verification using the concept of materiality shall achieve a reasonable level of assurance.~~

~~10. The CMP materiality decision prescribes the thresholds for the application of materiality in verifications, by defining that information is material if it might lead, at an aggregated level, to an overestimation of the total emission reductions or removals achieved by a CDM project activity equal to or higher than:~~

- ~~(a) 0.5 per cent of the emission reductions or removals for project activities achieving a total emission reduction or removal of equal to or more than 500,000 tons of carbon dioxide equivalent per year;²~~
- ~~(b) 1 per cent of the emission reductions or removals for project activities achieving a total emission reduction or removal between 300,000 and 500,000 tons of carbon dioxide equivalent per year;~~

[†] ~~In cases of temporary deviations and permanent changes from the registered monitoring plan or applied methodology, DOEs are to follow the applicable requirements in the “Post registration changes” section of the “Clean development mechanism validation and verification standard” (VVS).~~

² ~~A year refers to a period of 12 consecutive months.~~

- (c) 2 per cent of the emission reductions or removals for large-scale project activities achieving a total emission reduction or removal of 300,000 tons of carbon dioxide equivalent per year or less;
- (d) 5 per cent of the emission reductions or removals for small-scale project activities other than project activities covered under subparagraph (e) below;
- (e) 10 per cent of the emission reductions or removals for the type of project activities referred to in decision 3/CMP.6, paragraph 38 (referred to as microscale project activities).

5. Guidelines on the application of materiality in verifications

5.1. General information on the concept of materiality

11. Materiality is an auditing concept to be applied by DOEs in verifications in order to detect errors, omissions or misstatements in emission reductions or removals being claimed by project participants in monitoring reports for CDM project activities.³
12. To achieve a balance between cost and time to conduct a verification, it is acceptable for DOEs to obtain a reasonable level of assurance on whether the claimed emission reductions or removals are free from material errors, omissions or misstatements.
13. Recognizing that circumstances may exist that could cause the information reported by project participants to be materially misstated, DOEs should must plan and perform verifications with an attitude of professional scepticism and rely on their professional judgement while applying the concept of materiality.
14. The application of materiality and reasonable level of assurance imply that some data or information may not be checked. However, DOEs should must design their verification and sampling plans to detect all material errors, omissions or misstatements, and any unchecked data or information should not contain any material errors, omissions or misstatements. A DOE's verification opinion applies to 100 per cent of the data and information even if the DOE may not have checked the entire data set and information.
15. Applying materiality does not mean that identified errors are not corrected; if an error, omission or misstatement is identified by the DOE, regardless of whether it is material or not, the DOE is required by the "Clean development mechanism validation and verification standard" (VVS) to request project participants to address it. Project participants then have to correct the error or, if it is not possible to do so, follow the requirements related to post-registration changes in the "Clean development mechanism project standard" (PS). However, the issue of addressing identified errors is outside the scope of this Guideline.

³ Further background information on the concept of materiality can be found in Annex A of ISO 14064-3 Specifications with guidance for the validation and verification of greenhouse gas assertions.

5.2. Consideration of materiality in planning the verification

16. In planning a verification the DOE should:

- (a) Identify the materiality threshold in paragraph 13 above that corresponds to the amount of emission reductions or removals the specific type of CDM project activity will achieve;
- (b) Understand the environment in which the project activity operates, the sources of project emissions within the project boundary and the leakage, the monitoring activities, the equipment used to monitor or measure activity data, the origin and application of data used to calculate or measure the emissions, data flow, the internal quality control system, and the overall organization with respect to monitoring and reporting;⁴
- (c) Conduct a risk assessment to identify and assess the risks of individual or aggregated material errors, omissions or misstatements that may occur within the threshold based on elements in subparagraphs (a) and (b) above;
- (d) Design verification and sampling plans and audit procedures⁵ whose type, timing⁶ and extent are based on and are responsive to the assessed risks of material errors, omissions or misstatements.

17. The materiality thresholds apply to the total emission reductions or removals actually achieved. When planning a verification, the DOE should apply the applicable materiality threshold to the reported total emission reductions or removals. If, as a result of the verification, the initial reported total emission reductions or removals is revised, the DOE should reapply the materiality threshold to the revised total emission reductions or removals and, if needed, make adjustments to its verification and sampling plans.

5.3. Consideration of materiality in conducting the verification

18. In conducting a verification the DOE should:

- (a) Apply verification and sampling plans and audit procedures;
- (b) Assess potential errors, omissions and misstatements against the materiality threshold to determine whether they are material individually or in aggregate and whether further audit procedures are needed.

19. If an error, omission or misstatement is detected, the DOE should be aware that it may not be an isolated occurrence and may be a systemic reoccurring error. For example, other errors may exist if the DOE identifies that the error, omission or misstatement arose from a breakdown in the project participants' internal quality control and quality assurance system.

⁴ Adapted from European Union. 2007. *Commission Decision of 18 July 2007 establishing guidelines for the monitoring and reporting of greenhouse gas emissions pursuant to Directive 2003/87/EC of the European Parliament and of the Council.*

⁵ In accordance with paragraph 217 of the VVS.

⁶ For example, timing may refer to the specific time intervals for which the DOE may draw its samples.

20. In cases where an immaterial error, omission or misstatement is detected, the DOE should determine whether additional audit procedures should be conducted in order to reach a reasonable level of assurance that the claimed emission reductions or removals are free from material error, omission or misstatement.

21. In cases where a material error, omission or misstatement is detected, the DOE may, depending on the circumstances of the error as per paragraph 19 above, immediately request project participants to address it, or conduct additional audit procedures to confirm or determine the context and magnitude of the error, omission or misstatement and then request project participants to address it.

22. In both paragraphs 20 and 21 above, any errors, omissions or misstatements, material or immaterial, are to be addressed (see paragraph 15 above).

23. If further audit procedures are necessary, the DOE may consider whether the overall verification and sampling plans need to be revised.

5.4. Reporting on the application of materiality

24. The DOE should describe in its verification/certification report the risks, the risk assessment undertaken and how the verification and sampling plans were designed to respond to these risks and ensure that all material errors, omissions or misstatements were detected.

25. The DOE should also describe whether and how the verification and sampling plans were revised to take into account the need for further audit procedures due to the nature/type of errors, omissions or misstatements detected.

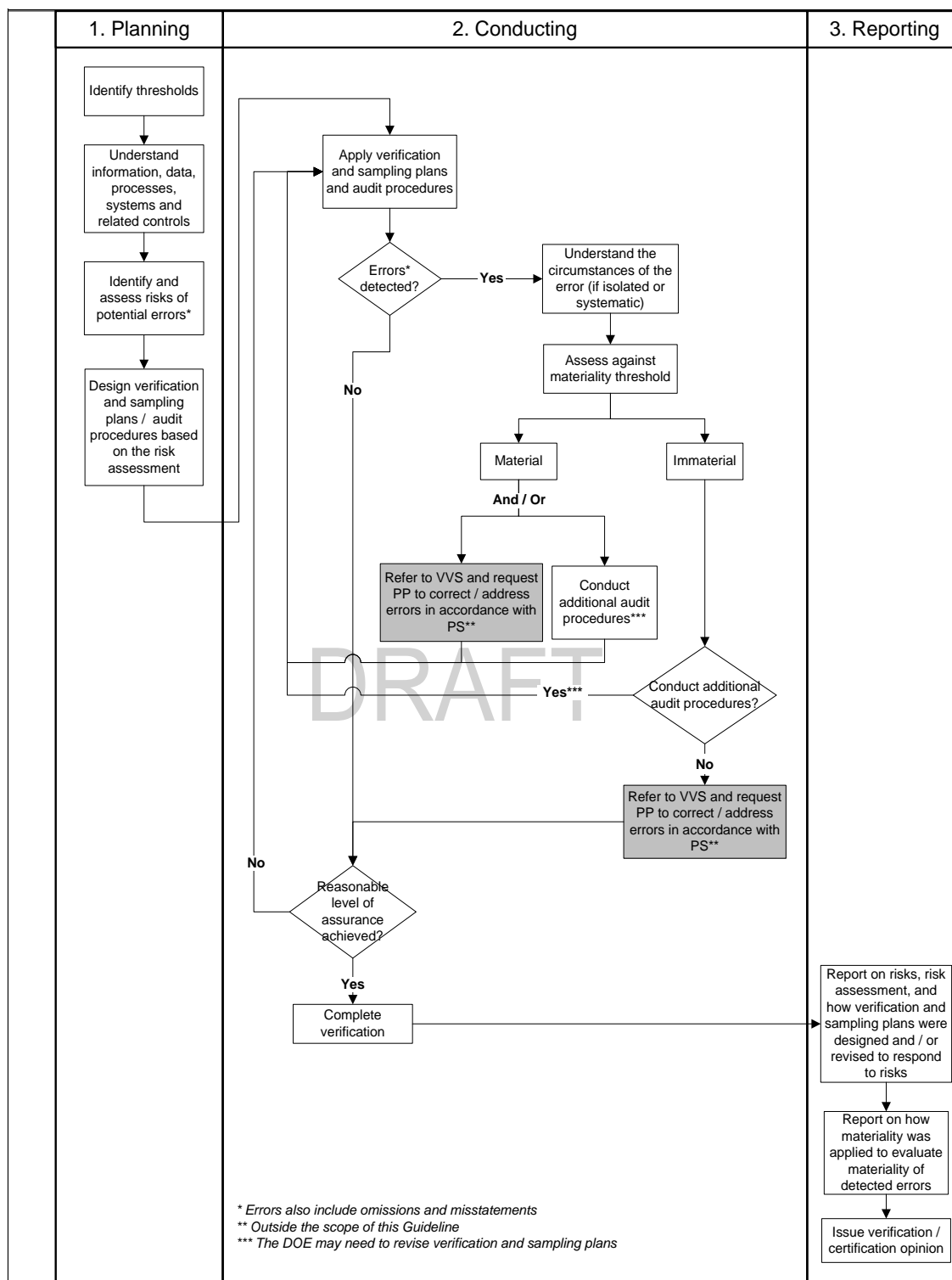
26. The DOE should also document how materiality was applied in determining whether a detected error, omission or misstatement was material or immaterial either individually or in aggregate.

27. The DOE should state in its verification/certification opinion that the claimed emission reductions or removals are free from material errors, omissions or misstatements, with a reasonable level of assurance.

6. Flowchart on the application of materiality in verification

28. The flowchart in Figure 1 illustrates how to apply materiality should be applied by DOEs in verifications based on the provisions in this Guideline in accordance with the CDM validation and verification standard (VVS).

Figure. Flowchart on the application of materiality in verification



7. Examples of the application of materiality in verifications

7.1. General

29. The following are examples of situations where the concept of materiality is applied in verifications. These examples are only intended to help understand how materiality can be applied, and are not binding rules.

7.2. Examples in planning verifications

30. Example 1:

- (a) In planning the verification, the DOE ~~should~~ **must** identify and assess the risks of individual or aggregated material errors, omissions or misstatements in consideration of the applicable materiality threshold and the required level of assurance to reach. Examples of potential causes of risk may include⁷:
 - (i) Human error in the quantification of emissions (which may be more likely to occur if personnel are unfamiliar with, or not well trained regarding, emissions processes or data recording);
 - (ii) (Undue reliance on a poorly designed information system, which may have few effective quality controls; for example, the use of spreadsheets without adequate controls related to data changes/updates, version tracking, traceability, security, etc.;
 - (iii) Manual adjustment of otherwise automatically recorded activity levels; for example, manual input may be required if a flare meter becomes overloaded.
- (b) The DOE may design its verification to respond to the assessed risks by applying the following audit techniques:
 - (i) Depending on the monitoring period being verified, conduct increased sampling during the months when there is a greater likelihood of errors and issues with data quality control due to project participants' leave schedules;
 - (ii) Depending on how data is generated, processed, and reported, place greater emphasis on verifying data captured and processed manually and/or in spreadsheets versus those that are generated from an automated system.

⁷ Drawn from ISAE 3410, Assurance Engagements on Greenhouse Gas Statements (Exposure draft - January 2011).

31. Example 2:⁸

- (a) The project is a large-scale CDM project activity achieving total emission reductions of <300,000 tons of CO₂e per year; as such, a 2 per cent materiality thresholds is applied.
- (b) The verification of this project activity requires the verification of emissions from only three sources. From an initial review of top-level data, the first emission source reportedly accounts for 78.2 per cent of the total emission reductions, the second source accounts for 20 per cent of the total emission reductions and the third source reportedly accounts for 1.8 per cent of the total emission reductions (i.e. less than the materiality threshold of 2 per cent).
- (c) Based on the DOE's knowledge of how the project participants collect, measure, process, and report data for each source, the DOE determines that the second source (accounting for 20 per cent of total emission reductions) has the highest potential for errors, omissions or misstatements since the data are manually recorded in a spreadsheet. The other two sources use automated data feeds to record the data.
- (d) The verification plan is therefore designed to ensure that the majority of time to test and detect potential errors is spent on verifying the source with the highest risk for potential misstatements versus the first and third sources that together account for 80 per cent of total emission reductions.

7.3. Examples in conducting verifications32. Example 3:⁹

- (a) The project is a small-scale CDM project activity achieving total emission reductions of <30,000 tons of CO₂e per year; as such, a 5 per cent materiality threshold is applied.
- (b) The project activity's monitoring plan involves surveying thousands of households. Along the audit trail the DOE checks by random sampling, following the sampling standard, whether the transfer from hand-written survey records to a project data base was performed adequately.
- (c) The sampling approach by the DOE showed that out of 200 samples, two data transfers were made erroneously. When extrapolating the resulting error to the whole data set the overestimation at a 95 per cent confidentiality interval would be less than 0.5 per cent.
- (d) The DOE requests, in accordance with the VVS, the project participants to correct the two identified errors and to review the whole data set to check whether similar errors also occurred in the remaining data set not checked by the DOE. After having confirmed that the project participants have corrected the

⁸ Adapted from an example provided by the Designated Operational Entities and Independent Entities Association (D&IA).

⁹ Adapted from an example provided by D&IA.

identified errors, and having determined that there is no risk of material errors within the data set, the DOE determines that further sampling is not needed.

33. Example 4:¹⁰

- (a) The project is a large-scale CDM project activity achieving total emission reductions of 400,000 tons of CO₂e per year; as such, a 1 per cent materiality threshold is applied.
- (b) During the course of the verification, errors are identified within a data set and are identified to have been caused by errors in manual transposition.
- (c) Due to the cause, these errors are easily quantified, and are identified to represent an error of 0.5 per cent of the total emission reductions (i.e. less than the materiality threshold of 1 per cent).
- (d) Despite these errors being less than the materiality threshold of 1 per cent, the DOE, in accordance with the VVS, requests the project participants to correct the data set containing the errors. These errors are corrected by the project participants and the DOE confirms the corrections but also decides to test another sample of data in order to reach a reasonable level of assurance that no additional errors are present in the data set that when aggregated with other detected errors could be material.
- (e) No further errors are identified in the additional data set, and the DOE proceeds with the remaining elements of the verification as defined in its verification plan.

34. Example 5:¹¹

- (a) The project is a large-scale CDM project activity achieving total emission reductions of >500,000 tons of CO₂e per year; as such, a 0.5 per cent materiality threshold is applied.
- (b) During the course of the verification, errors are identified within a data set caused by erroneous meter readings. These errors are quantified to represent an error of 1 per cent of the total emission reductions (i.e. more than the materiality threshold of 0.5 per cent).
- (c) The DOE, in accordance with the VVS, requests the project participants to correct the data set containing the errors before conducting any further audit procedures.
- (d) The errors are caused by a failure of the meter to provide updated readings at the defined frequency and have resulted in the last reading being repeated for a period. The monitoring plan defines the approach to be applied in these circumstances and the project participants correct the data set in accordance with the defined approach.
- (e) The DOE confirms the corrections are in accordance with the monitoring plan and continues with the verification of the same data set. No further errors are

¹⁰ Adapted from an example provided by D&IA.

¹¹ Adapted from an example provided by D&IA.

identified in the data set, the DOE confirms the data set to be free from material error and proceeds with the verification as defined in the verification plan.

35. Example 6:¹²

- (a) The project is a large-scale CDM project activity achieving total emission reductions of >500,000 tons of CO₂e per year; as such, a 0.5 per cent materiality threshold is applied.
- (b) The project activity includes the operation of a back-up generator powered by fossil fuel which contributes to 2 per cent of the project emissions. Fuel consumption of the generator is monitored by a fuel balance comprising the determination of the fuel stock at the beginning and the end of the monitoring period and the determination of all fuel purchases during that period. The maximum fuel stock is equivalent to an amount of 0.1 per cent of the project emissions.
- (c) While it could be confirmed that there is no material misstatement within all other data required for the calculation of the emission reductions as well as regarding the completeness, consistency and plausibility of fuel purchase data, the record for the fuel stock at the end of the monitoring period was taken manually by a single person without any corroborating evidence. The reading for the fuel stock at the beginning of the monitoring period is consistent with the one at the end of the previous period.
- (d) When planning the verification activities for this emission source the DOE will focus on the completeness, consistency and plausibility of fuel purchase data. No specific attention will be paid to the fuel stock as even in the worst case any misstatement would result in a significantly lower over-estimation of emission reductions compared to the materiality threshold and would result in an equivalent under-estimation in the following period.

36. Example 7:¹³

- (a) The project is a large-scale CDM project activity achieving total emission reductions of 150,000 tons of CO₂e per year; as such, a 2 per cent materiality threshold is applied (3,000 t CO₂e).
- (b) One of the parameters used for determining the project's baseline emissions is the measurement of the chemical oxygen demand (COD) of wastewater, which according to the monitoring plan is performed daily.
- (c) The monitoring period covers 540 days. The daily COD values are presented for verification in the emission reduction calculation spreadsheet and records are available for all 540 measurements carried out during the monitoring period. The COD values are manually transferred from the measurement records to the emission reduction calculation spreadsheet.

¹² Provided by D&IA.

¹³ Provided by D&IA.

- (d) The DOE has assessed the reported data and found that the reported COD values are reasonable and there are no outliers which need further investigation. The DOE thus applies sampling for verifying that the COD values in the emission reduction calculation spreadsheet are consistent with the actual measurement records and selects a random sample.
- (e) The DOE identifies that for five of the records checked an error was made in transferring the data from the measurement record to the emission reduction calculation spreadsheet. The errors identified (typographical errors with some digits) do not represent more than 10 per cent of the reported value. Nonetheless, assuming that the frequency of errors in transferring data may be at least the same in the remaining data set as found in the sample (when applying the percentage of error for the COD value of the records to the total COD value for 540 records the error in the emission reduction calculation is more than 3,000 t CO₂e), the possible error in the total reported emission is therefore material. The project participants are thus requested, through a corrective action request (CAR), to correct the errors identified in the sample and once more check the remaining records and correct any further errors.
- (f) The project participants submit a revised emission reduction calculation spreadsheet in which the eight errors identified by the DOE's sample were corrected in addition to 15 other values. To further verify the data set, the DOE selects a further random sample from the remaining data set. The DOE identifies that for one of the sampled records, the value was erroneously transferred to the emission reduction calculation spreadsheet. Again, the error identified (typographical errors with some digits) does not represent more than 10 per cent of the reported value.
- (g) The project participants are thus requested, through another CAR, to correct the error identified in the second sample and once more check the remaining records and correct any further errors. The project participants submit a revised emission reduction calculation spreadsheet in which the identified error is corrected. The DOE decides not to carry out further verification and does not select another sample. Even if there are possibly further errors in the remaining data set not checked by the DOE, when applying the percentage of error for the COD value identified in the sample of records to the remaining COD value the error in the emission reductions calculation is less than 3,000 tCO₂e. Hence, any possible remaining misstatement in the reported COD values would not have a material impact on reported emission reductions.

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DRAFT

Appendix 3. Amendment to version 07.0 of the Glossary: CDM terms (version 1.0)

CDM-EB82-AA-A15

Amendment to the Glossary: CDM terms

Version 01.0



United Nations
Framework Convention on
Climate Change

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1. Amendment introduced in the Glossary: CDM terms

1. This document contains amendments to the “Glossary: CDM terms” (Version 07.0) (CDM-EB07-A04-GLOS) due to the revision to the “Guideline on the application of materiality in verifications” (Version 01.0) (CDM-EB69-A06-GUID).
2. This document will be consolidated into the “Glossary of CDM terms” (Version 08.0). After the consolidation, the “Glossary: CDM terms” (Version 08.0) enters into force on 1 April 2015.

2. Changes to Section 5 Definition of terms in alphabetical order

3. The following three terms shall be inserted:

Materiality

An auditing concept to be applied by DOEs in verifications in order to detect errors, omissions or misstatements in emission reductions or removals by sinks being claimed by project participants in monitoring reports for CDM project activities.

Material information

A piece of information the omission, misstatement or erroneous reporting of which could change a decision by the Board.

Reasonable level of assurance

A high, but not absolute, level of assurance.

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