

CGE SUPPLEMENTARY TRAINING MATERIAL FOR THE TEAM OF TECHNICAL EXPERTS

Module 1

Technical analysis of biennial
update reports: an overview

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ABBREVIATIONS

BUR	biennial update report
CGE	Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention
CH₄	methane
CO₂	carbon dioxide
COP	Conference of the Parties
GCF	Green Climate Fund
GEF	Global Environment Facility
GHG	greenhouse gas
GPG 2000	Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories
GPG LULUCF	Good Practice Guidance for Land Use, Land-Use Change and Forestry
GWP	global warming potential
HFCs	hydrofluorocarbons
ICA	international consultation and analysis
IPCC	Intergovernmental Panel on Climate Change
LDC	least developed country Party
LULUCF	land use, land-use change and forestry
MRV	measurement, reporting and verification
NAMAs	nationally appropriate mitigation actions
NC	national communication
Non-Annex I Parties	Parties not included in Annex I to the Convention
PFCs	perfluorocarbons
REDD	reducing emissions from deforestation and forest degradation in developing countries

SBI	Subsidiary Body for Implementation
SF₆	sulphur hexafluoride
TTE	team of technical experts
UNFCCC	United Nations Framework Convention on Climate Change

1. OBJECTIVES, CONTENT AND EXPECTATIONS OF THE TRAINING MODULE

1.1. OBJECTIVES

The specific objectives of this module are twofold:

- a) Provide a comprehensive overview of the knowledge base necessary to implement the measurement, reporting and verification (MRV) framework for developing country Parties under the Convention, including the technical analysis of biennial update reports (BURs) by a team of technical experts under the international consultation and analysis (ICA) process;
- b) Address other cross-cutting elements that can facilitate the efficient conduct of the technical analysis.

1.2. CONTENT

This training module includes the following:

- a) Introduction to the existing MRV framework for developing country Parties;
- b) Overview of the “Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention”;
- c) Detailed elaboration of “UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention” and the “Modalities and guidelines for international consultation and analysis”, including the technical analysis of BURs by a team of technical experts (TTE);
- d) Other elements that contribute to the efficient conduct of the technical analysis of BURs by a TTE.

1.3. EXPECTATIONS

This training module is intended to enhance the knowledge base necessary for the experts to participate in and undertake the technical analysis of BURs in accordance with the guidelines and modalities contained annex IV to decision 2/CP.17 and the annex to decision 20/CP.19, and in a manner that is consistent across the BURs submitted by Parties not included in Annex I to the Convention (non-Annex I Parties).

2. INTRODUCTION

The United Nations Framework Convention on Climate Change (UNFCCC), which was adopted in 1992 and entered into force in 1994, laid the foundation for the current system of reporting of information related to the implementation of the Convention by Parties.

According to Articles 4.1 and 12.1 of the Convention, all Parties need to report to the Conference of the Parties (COP) information on their emissions by sources and removals by sinks, of all greenhouse gases (GHGs) not controlled by the Montreal Protocol; and on the steps they are taking to implement the Convention through national communications. The latter includes national or, where appropriate, regional programmes containing measures to mitigate, and to facilitate adequate adaptation to climate change; and any other information that the Party considers relevant to the achievement of the objective of the Convention. This information, in the form of a national communication, is prepared and submitted on the basis of the revised “Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention” (hereinafter referred to as NC guidelines) contained in the annex to decision 17/CP.8.

Further, the Convention obliged each non-Annex I Party to submit its initial national communications within three years of the entry into force of the Convention for that Party, or of the availability of financial resources.¹ The least developed country Parties (LDCs) can make the submission at their own discretion. Currently, non-Annex I Parties should submit their national communications every four years or in accordance with any further decisions on frequency by the COP, taking into account a differentiated timetable and the prompt provision of financial resources to cover the agreed full costs incurred by non-Annex I Parties.²

Up to COP 13, there was no process for considering the national reports submitted by developing country Parties under the Convention, except for the compilation and synthesis of information reported in submitted national communications. It was at COP 13, through the Bali Action Plan, that Parties agreed to the principle of applying MRV to developing country Parties in the context of undertaking enhanced national and/or international action on mitigation of climate change.³ This provided the foundation for the subsequent elaboration of the existing comprehensive MRV framework for developing country Parties.

The process of MRV, which started at COP 13 in 2007, resulted in a few key milestones at COP 16 in 2010. In addition to defining the frequency of the submission of national communications from non-Annex I Parties, every four years, further elements of MRV were agreed to,⁴ including:

¹ Article 12, paragraph 5 and Article 4, paragraph 3 of the UNFCCC.

² Decision 1/CP.16, paragraph 60.

³ Decision 1/CP.13.

⁴ Decision 1/CP.16.

- Submitting BURs every two years;
- Conducting ICA of BURs that aims to increase the transparency of mitigation actions and their effects;
- Subjecting both domestically and internationally supported mitigation actions to domestic MRV.

COP 17 adopted the “UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention”, (hereinafter referred to as BUR guidelines) as well as modalities and guidelines for ICA. In adopting the decisions, the COP decided that developing country Parties should, consistent with their capabilities and the level of support provided for reporting, submit their first BUR by December 2014. After the submission of the first one, subsequent BURs are to be submitted every two years on a mandatory basis. The LDCs and small island developing States (SIDs) may submit this report at their discretion.

The first rounds of ICA will commence within six months of the submission of the first round of BURs by developing country Parties. The frequency of the subsequent rounds of ICA is determined by the frequency of the submissions of BURs, which is every two years, with special flexibility for SIDs and LDCs, which may undergo ICA at their discretion. ICA will consist of two steps: the technical analysis of BURs by a team of technical experts and a facilitative sharing of views, in the form of a workshop convened at regular intervals under the Subsidiary Body for Implementation (SBI).

Two years later, COP 19 made another significant advance in the implementation of the MRV framework. It resulted in a number of decisions capturing all the key elements necessary for the implementation of the MRV framework for developing country Parties:

- Composition, modalities and procedures for the team of technical experts to conduct technical analysis under the ICA;⁵
- General guidelines for domestic MRV;⁶
- Warsaw Framework for REDD-plus.⁷

Furthermore, the term of the Consultative Group of Experts on National Communications from Parties not included in Annex I to the Convention (CGE), was continued for another five years from 2014 to 2018. The mandate was expanded to include the capacity-building of experts participating in the technical analysis under the ICA.

The subsequent chapters outline the key elements of the MRV framework for developing country Parties, based on the relevant Articles of the Convention as well as the latest decisions and guidelines adopted by the COPs.

⁵ Decision 20/CP.19.

⁶ Decision 21/CP.19.

⁷ Decisions 9/CP.19, 10/CP.19, 11/CP.19, 12/CP.19, 13/CP.19, 14/CP.19 and 15/CP.19.

3. REPORTING NATIONAL COMMUNICATIONS AND BIENNIAL UPDATE REPORTS

This chapter covers the overview of guidelines for the preparation of national communications and biennial update reports.

While the national communication is not in itself subjected to ICA, there are many areas of overlap between the national communication and the BUR, hence it is important that the experts participating in the team of technical experts have a thorough understanding of the NC guidelines. The linkages stem from the fact that the scope of BURs is to provide an update to the most recently submitted national communications.

3.1. NATIONAL COMMUNICATIONS

3.1.1. INTRODUCTION

The commitment for Parties to communicate to the COP information relating to the implementation of the Convention is guided by Articles 4 and 12 of the Convention. Further details on the parts of these Articles relevant in this context are provided below.

In accordance with Article 4, paragraph 1, each Party, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, shall, among other things:

- a) Develop, periodically update, publish and make available to the COP, national inventories of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol, using comparable methodologies to be agreed upon by the COP;
- b) Formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change, and measures to facilitate adequate adaptation to climate change.

Further, in accordance with Article 12, paragraph 1, each Party shall communicate to the COP, through the secretariat in the form of a national communication, the following elements of information:

- a) A national inventory of anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol, to the extent its capacities permit, using comparable methodologies to be promoted and agreed upon by the COP;
- b) A general description of steps taken or envisaged by the Party to implement the Convention; and
- c) Any other information that the Party considers relevant to the achievement of the objective of the Convention and suitable for inclusion in its communication, including, if feasible, materials relevant for calculation of global emission trends.

National communications are at the heart of reporting on progress in the implementation of the Convention. Non-Annex I Parties, currently, prepare and submit their national communications following the NC guidelines contained in the annex to decision 17/CP.8, taking into account their development priorities, objectives and national circumstances. At COP 16, Parties agreed that non-Annex I Parties should submit their national communications every four years or in accordance with any further decisions on frequency by the COP, taking into account a differentiated timetable for Annex I and non-Annex I Parties as well as the provision of financial resources to cover the agreed full costs incurred by non-Annex I Parties in preparing their national communications.

3.1.2. OBJECTIVES OF THE GUIDELINES

The principal objectives of the NC guidelines are:

- a) To assist non-Annex I Parties in meeting their reporting requirements under the Convention;
- b) To encourage the presentation of information in a consistent, transparent and comparable, as well as flexible manner, taking into account specific national circumstances;
- c) To facilitate the presentation of information on support required for the preparation and improvement of national communications from non-Annex I Parties;
- d) To serve as policy guidance to the operating entity of the financial mechanism for the timely provision of financial support needed by developing country Parties in order to meet the agreed full costs of complying with their obligations under Article 12, paragraph 1, of the Convention as referred to in decisions 11/CP.2, 2/CP.4, 2/CP.7 and 6/CP.7;
- e) To ensure that the COP has sufficient information to carry out its responsibility for assessing the implementation of the Convention by Parties.

3.1.3. SCOPE

The scope of the information to be communicated through national communication, guided by Article 12, paragraph 1, of the Convention and elaborated through the NC guidelines, includes the following elements:

- a) National circumstances;
- b) National GHG inventory;
- c) General description of steps taken or envisaged to implement the Convention:
 - i) Programmes containing measures to facilitate adequate adaptation to climate change;
 - ii) Programmes containing measures to mitigate climate change.
- d) Other information considered relevant to the achievement of the objective of the convention:
 - 1. Transfer of technologies;

2. Research and systematic observation;
 3. Education, training and public awareness;
 4. Capacity-building;
 5. Information and networking.
- e) Constraints and gaps, and related financial, technical and capacity needs.

The details of each of these elements are further elaborated in Annex I.

3.2. BIENNIAL UPDATE REPORTS

3.2.1. INTRODUCTION

At COP 16 in Cancun in 2010, the Parties decided to enhance reporting in national communications from non-Annex I Parties on national GHG inventories, mitigation actions and their effects, and support received.⁸ The LDCs and SIDs have been given additional flexibility. It was also decided that developing countries, consistent with their capabilities and the level of support provided for reporting, should submit their first BURs by December 2014 and every second year afterwards.

BURs are intended to provide updates on actions undertaken by a Party to implement the Convention, including the status of its greenhouse gas emissions and removals by sinks, as well as on the actions to reduce emissions or enhance sinks, and support needed and received to implement these actions.

Non-Annex I Parties shall prepare their BURs on the basis of the BUR guidelines adopted by COP 17, in 2011, which are contained in annex III to decision 2/CP.17. In using the BUR Guidelines, non-Annex I Parties should take into account their development priorities, objectives, capacities and national circumstances.

3.2.2. OBJECTIVES OF THE GUIDELINES

The objectives of the BUR guidelines are similar to those of the NC guidelines (see table 1 below). They are:

- a) To assist non-Annex I Parties in meeting their reporting requirements under Article 4, paragraph 1(a), and Article 12 of the Convention and decision 1/CP.16;
- b) To encourage the presentation of information in a consistent, transparent, complete, accurate and timely manner, taking into account specific national and domestic circumstances;
- c) To enable enhanced reporting by non-Annex I Parties on mitigation actions and their effects, needs and support received, in accordance with their national circumstances, capacities and respective capabilities, and the availability of support;

⁸ Decision 1/CP.16.

- d) To provide policy guidance to an operating entity of the financial mechanism for the timely provision of financial support needed by developing country Parties in order to meet the agreed full costs of preparing their biennial update reports (to the Global Environment Facility (GEF) in the case of first BUR);
- e) To facilitate the presentation of information on finance, technology and capacity-building support needed and received, including for the preparation of BURs;
- f) To facilitate reporting by non-Annex I Parties, to the extent possible, on any economic and social consequences of response measures.

Table 1

Comparison of the objectives of the national communication guidelines and the biennial update report guidelines

Biennial update report	National communication
To assist non-Annex I Parties in meeting their reporting requirements under Article 4, paragraph 1(a), and Article 12 of the Convention and decision 1/CP.16	To assist non-Annex I Parties in meeting their reporting requirements under the Convention
To encourage the presentation of information in a consistent, transparent, complete, accurate and timely manner, taking into account specific national and domestic circumstances	To encourage the presentation of information in a consistent, transparent and comparable, as well as flexible, manner, taking into account specific national circumstances
To enable enhanced reporting by non-Annex I Parties on mitigation actions and their effects, needs and support received, in accordance with their national circumstances, capacities and respective capabilities, and the availability of support	To facilitate the presentation of information on support required for the preparation and improvement of national communications from non-Annex I Parties
To provide policy guidance to an operating entity of the financial mechanism for the timely provision of financial support needed by developing country Parties in order to meet the agreed full costs of preparing their biennial update reports	To serve as policy guidance to the operating entity of the financial mechanism for the timely provision of financial support needed by developing country Parties in order to meet the agreed full costs of complying with their obligations under Article 12, paragraph 1, as referred to in decisions 11/CP.2, 2/CP.4, 2/CP.7 and 6/CP.7
To facilitate the presentation of information on finance, technology and capacity-building support needed and received, including for the preparation of biennial update reports	To ensure that the Conference of the Parties has sufficient information to carry out its responsibility for assessing the implementation of the Convention by Parties
To facilitate reporting by non-Annex I Parties, to the extent possible, on any economic and social consequences of response measures	

3.2.3. SCOPE

The guidelines clearly state that the scope of BURs is to provide an update to the most recently submitted national communications in the following areas:

- a) Information on national circumstances and institutional arrangements relevant to the preparation of the national communications on a continuous basis;
- b) The national inventory of anthropogenic emissions by sources and removal by sinks of all GHGs not controlled by the Montreal Protocol, including a national inventory report;
- c) Information on mitigation actions and their effects, including associated methodologies and assumptions;
- d) Constraints and gaps, and related financial, technical and capacity needs, including a description of support needed and received;
- e) Information on the level of support received to enable the preparation and submission of biennial update reports;
- f) Information on domestic measurement reporting and verification;
- g) Any other information that the non-Annex I Party considers relevant to the achievement of the objective of the Convention and suitable for inclusion in its biennial update report.

At a broader thematic level, there is significant overlap between national communications and biennial update reports (see table 2 below). However, as elaborated in sections 3.2.4, 3.2.5 and 3.2.6, there are subtle differences in the depth and structure of the information to be reported.

Table 2

Comparison of the scope of the national communication guidelines and the biennial update report guidelines

Decision 17/CP. 8: National Communications	Decision 2/CP.17: BURs
(I) National circumstances	(I) National circumstances and institutional arrangements
(II) National greenhouse gas inventory <ul style="list-style-type: none"> • Revised 1996 IPCC guidelines (“should”) • IPCC GPG-2000 and IPCC GPG-2003 (LULUCF) (“encouraged”) • Inventory year: 1994/1990 for INCs and 2000 for SNCs • Tables 1 and 2 (“encouraged”) • Sectoral tables and worksheets (“encouraged”) • Information on methodologies (“encouraged”) 	(II) National greenhouse gas inventory and inventory report <ul style="list-style-type: none"> • Revised 1996 IPCC guidelines, IPCC GPG-2000 and IPCC GPG-2003 (LULUCF) (“should”) • Inventory year: no more than 4 years prior to submission • Tables 1 and 2 (“should”) • Annex 3A.2 of IPCC GPG-2003 and the sectoral tables annexed to the Revised 1996 IPCC guidelines (para. 6, annex) (“encouraged”) • Summary information tables of inventories for previous submission years (e.g. for 1994 and 2000) (“encouraged”) • Additional or supporting information may be submitted in a technical annex (“encouraged”) • Time series - provide a consistent time series back to the years reported in the previous national communications (“encouraged”)

Decision 17/CP. 8: National Communications	Decision 2/CP.17: BURs
(III) General description of steps....to implement the Convention (a) Programmes and measures to mitigate <ul style="list-style-type: none"> • General requirements • Methods and assessment /analysis (results) (b) Programmes and measures to adapt to climate change (vulnerability and assessment)	(III) Mitigation actions and their effects <ul style="list-style-type: none"> • Methodologies and assumptions • Objectives of the action and steps taken or envisaged to achieve that action • Progress of implementation and the underlying steps taken or envisaged, and the results achieved, such as estimated outcomes (metrics depending on type of action) and estimated emission reductions, to the extent possible • International market mechanisms • Description of domestic MRV arrangements
(IV) Constraints and gaps and related financial, technical and capacity needs	(IV) Constraints and gaps, related financial, technical and capacity needs, description of support received and needed
(V) Other relevant information (transfer of technology; research and systematic observation; education, training and public awareness; capacity-building; information and networking)	(V) Any other information.....relevant to the BUR
(VI) Submission: every 4 years	(VI) Submission: every 2 years

The guidelines contain further details on the areas of enhanced reporting on national GHG inventories, mitigation actions and finance, technology and capacity building needs, and support received.

3.2.4. GREENHOUSE GAS INVENTORY

The provisions for preparing and reporting national GHG inventories in BURs are elaborated in decision 2/CP.17, annex III, paragraphs 3–10.

National GHG inventories should be, in general, prepared according to paragraphs 8–24 of the NC guidelines. Currently, the latest NC guidelines are contained in the annex to decision 17/CP.8. Further, non-Annex I Parties should use the methodologies established by the latest adopted guidelines for the preparation of national communications from non-Annex I Parties or those determined by any future decision of the COP on this matter.

The current NC guidelines require non-Annex I Parties to use, at a minimum, the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (hereinafter referred to as the Revised 1996 IPCC Guidelines) and the 1995 IPCC global warming potential values for estimating their national GHG emissions by sources and removals by sinks.

Further, there are specific elements that apply to the BUR which are contained in paragraph 41(g) of decision 2/CP.17 (addressing the inventory year(s)) and paragraphs 4-10 of annex III of decision 2/CP.17.

The training material aims to reflect these guidelines and provide guidance to experts on critical elements to enhance transparency. It is also important to be aware that only the actual provision of an inventory is a 'shall' requirement, while all other elements mentioned are 'should' or 'encouraged'.

The additional elements are explained in the following sections (also see table 3).

3.2.4.1. Methodological approaches

The updates of national GHG emissions by sources and removals by sinks should contain updated data on activity levels based on the best information available using the Revised 1996 IPCC Guidelines, *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (hereinafter referred to as GPG 2000) and the *Good Practice Guidance for Land Use, Land-Use Change and Forestry* (hereinafter referred to as GPG LULUCF); any change to emission factors may be made in the subsequent full national communication.

Although Parties should use the Revised 1996 IPCC Guidelines, GPG 2000 and GPG LULUCF, there is also the recognition that some Parties may be using the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*, as they may be appropriate for their national circumstances.

3.2.4.2. Scope of inventory year(s) for first and subsequent rounds of biennial update reports

The first BUR shall cover, at a minimum, the inventory for the calendar year no more than four years prior to the date of the submission, or more recent years if information is available. The subsequent biennial update reports shall cover a calendar year that does not precede the submission date by more than four years. For example, if a Party submits its first BUR in 2014, the inventory year shall cover, at a minimum, the year 2010 or more recent years such as 2011 or 2012 if the information is available. For its second BUR, which a non-Annex I Party shall submit in 2016, the inventory year will be 2012 or more recent years such as 2013 or 2014 if the information is available.

3.2.4.3. Reporting

The report should be structured as a summary or as an update of the information contained in chapter III (National greenhouse gas inventory) of the annex to decision 17/CP.8, Parties **should** include:

- a) Table 1, contained in the annex to decision 17/CP.8 (National greenhouse gas inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol and greenhouse gas precursors);
- b) Table 2, also contained in the annex to decision 17/CP.8 (National greenhouse gas inventory of anthropogenic emissions of HFCs, PFCs and SF₆).

In addition, Parties are also **encouraged** to include:

- a) Tables included in annex 3A.2 to GPG LULUCF;

- b) Sectoral report tables annexed to the Revised 1996 IPCC Guidelines;
- c) Consistent time series back to the years reported in the previous national communications;
- d) Summary information tables of inventories for previous submission years reported in national communications (e.g. for 1994 and 2000);
- e) Additional or supporting information, including sector-specific information, in a technical annex. Developing country Parties voluntarily reporting REDD-plus⁹ activities in the context of results based payments must do so through the technical annex to their BUR which is subject to the technical analysis in accordance with the modalities for MRV of the REDD-plus activities contained in decision 14/CP.19. Information on the scope of this annex and of its technical analysis, as well as the outputs of the latter, is presented in detail in the REDD-plus module of these training materials (see module 3).

Table 3 below shows the comparison of the requirements for reporting national GHG inventories in the NC guidelines and the BUR guidelines.

⁹ In decision 1/CP.16, paragraph 70, the Conference of the Parties encouraged developing country Parties to contribute to mitigation actions in the forest sector by undertaking the following activities: reducing emissions from deforestation; reducing emissions from forest degradation; conservation of forest carbon stocks; sustainable management of forests; and enhancement of forest carbon stocks.

Table 3

Comparison of the requirements for reporting national greenhouse gas inventories in the national communication guidelines and the biennial update report guidelines

Elements	Biennial update reports	National communications
Methodology	<ul style="list-style-type: none"> Methodologies established by the latest UNFCCC guidelines for the preparation of national communications (decision 17/CP.8, annex, para. 4) Revised 1996 IPCC guidelines; IPCC good practice guidance; and IPCC good practice guidance for land use, land-use change and forestry (LULUCF) (annex III, para. 5) (“should”) 1995 IPCC global warming potential (GWP) values (“should”) 	<ul style="list-style-type: none"> Revised 1996 IPCC guidelines (“should”) IPCC good practice guidance (“encouraged”) 1995 IPCC GWP values (“should”)
Years	<ul style="list-style-type: none"> The biennial update report shall cover, at a minimum, the inventory for the calendar year no more than four years prior to the date of the submission, or more recent, if available 	<ul style="list-style-type: none"> Initial national communication: 1994, or alternatively 1990 (“shall”) Second national communication: 2000 (“shall”) LDCs (“at their discretion”)
Reporting	<ul style="list-style-type: none"> National inventory report <ul style="list-style-type: none"> Tables 1 and 2 (“should”) Annex 3A.2 of IPCC good practice guidance for LULUCF and the sectoral tables annexed to the Revised 1996 IPCC guidelines (“encouraged”) Summary information tables of inventories for previous submission years (e.g. for 1994 and 2000) (“encouraged”) Additional or supporting information may be submitted in a technical annex (“encouraged”) Time series – provide a consistent time series back to the years reported in the previous national communications (“encouraged”) 	<ul style="list-style-type: none"> Chapter of national communication <ul style="list-style-type: none"> Tables 1 and 2 (“encouraged”) Sectoral tables and worksheets (“encouraged”) Information on methodologies (“encouraged”)

3.2.5. MITIGATION ACTIONS

The provision of this information is described in decision 2/CP.17, annex III, paragraphs 11–13.

Non-Annex I Parties should provide information, in a tabular format, on actions to mitigate climate change, by addressing anthropogenic emissions by sources and removals by sinks of all GHGs not controlled by the Montreal Protocol.

For each mitigation action or groups of mitigation actions including, as appropriate, those listed in document FCCC/AWGLCA/2011/INF.1, developing country Parties shall provide the following information, to the extent possible:

- a) Name and description of the mitigation action, including information on the nature of the action, coverage (i.e. sectors and gases), quantitative goals and progress indicators;
- b) Information on methodologies and assumptions;
- c) Objectives of the action and steps taken or envisaged to achieve that action;
- d) Information on the progress of implementation of the mitigation actions and the underlying steps taken or envisaged, and the results achieved, such as estimated outcomes (metrics depending on type of action) and estimated emission reductions, to the extent possible;
- e) Information on international market mechanisms.

Parties should also provide information on the description of domestic measurement, reporting and verification arrangements.

Decision 24/CP.18 noted and welcomed the readiness of some non-Annex I Parties to put forward their current actions and plans in pursuit of economic diversification that have co-benefits in the form of emission reductions, adaptation to the impacts of climate change and response measures.

The same decision invited these and other Parties to submit further information on their actions and plans to the secretariat, and also decided that measurement, reporting and verification of the relevant aspects of actions and plans submitted under this decision will proceed as per the arrangements established by decisions 1/CP.16, 2/CP.17 and 1/CP.18 taking into account the broader objectives of the actions to be presented.

Parties may also report such information, in particular, on those actions and plans in pursuit of economic diversification that have co-benefits in the form of emission reductions and response measures under this chapter.

Table 4 shows the comparison of the requirements for reporting mitigation in the NC guidelines and the BUR guidelines.

Table 4

Comparison of the requirements for reporting mitigation in the national communication guidelines and the biennial update report guidelines

Biennial update reports	National communications
<ul style="list-style-type: none"> • For each mitigation action or groups of mitigation actions, provide the following information to the extent possible (“shall”): <ul style="list-style-type: none"> ○ (a) Name and description of the mitigation action, including information on the nature of the action, coverage (i.e. sectors and gases), quantitative goals and progress indicators; ○ (b) Information on methodologies and assumptions; ○ (c) Objectives of the action and steps taken or envisaged to achieve that action; ○ (d) Information on the progress of implementation of the mitigation actions and the underlying steps taken or envisaged, and the results achieved, such as estimated outcomes (metrics depending on type of action) and estimated emission reductions, to the extent possible; ○ (e) Information on international market mechanisms; • Information on the description of domestic measurement, reporting and verification arrangements (“should”). 	<ul style="list-style-type: none"> • Information on programmes and measures implemented or planned which contribute to mitigating climate change by addressing anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, including, as appropriate, relevant information by key sectors on methodologies, scenarios, results, measures and institutional arrangements (“encouraged”).

3.2.6. FINANCE, TECHNOLOGY AND CAPACITY-BUILDING NEEDS AND SUPPORT RECEIVED

The provision of this information is described in decision 2/CP.17, annex III, paragraphs 14–16.

Non-Annex I Parties should provide updated information on constraints and gaps, and related financial, technical and capacity-building needs.

Non-Annex I Parties should also provide updated information on financial resources; technology transfer; capacity-building; and technical support received from the GEF, Parties included in Annex II to the Convention and other developed country Parties, the Green Climate Fund (GCF) and multilateral institutions for activities relating to climate change, including for the preparation of the current biennial update report.

With regard to the development and transfer of technology, non-Annex I Parties should provide information on technology needs, which must be nationally determined, and on technology support received.

Table 5 shows the comparison of the requirements for reporting finance, technology and capacity-building needs and support received in the NC guidelines and the BUR guidelines.

Table 5

Comparison of the requirements for reporting finance, technology and capacity-building needs and support received in the national communication guidelines and the biennial update report guidelines

Biennial update reports	National communications
<ul style="list-style-type: none"> • Updated information on constraints and gaps, and related financial, technical and capacity-building needs (“should”); • Updated information on financial resources, technology transfer, capacity-building and technical support received from the Global Environment Facility (GEF), Parties included in Annex II to the Convention and other developed country Parties, the Green Climate Fund and multilateral institutions for activities relating to climate change, including for the preparation of the current biennial update report (“should”); • Information on technology needs, which must be nationally determined, and on technology support received (“should”). 	<ul style="list-style-type: none"> • Description of any constraints and gaps, and related financial, technical and capacity needs, as well as proposed and/or implemented activities for overcoming the gaps and constraints, associated with the implementation of activities, measures and programmes envisaged under the Convention, and with the preparation and improvement of national communications on a continuous basis (“should”); • Information on financial resources and technical support for the preparation of their national communications provided by themselves, as well as those received from the GEF, Annex II Parties or bilateral and multilateral institutions (“should”); • Information on financial resources and technical support provided by themselves and by the GEF, Annex II Parties or bilateral and multilateral institutions, for activities relating to climate change (“should”); • A list of projects proposed for financing, in accordance with Article 12, paragraph 4, of the Convention, in preparation for arranging the provision of technical and financial support (“encouraged”); • Information on opportunities and barriers for the implementation of adaptation measures, including pilot and/or demonstration adaptation projects, being undertaken or proposed (“may”); • Information on how support programmes from Parties included in Annex II to the Convention are meeting their specific needs and concerns relating to vulnerability and adaptation to climate change (“may”); • Information on country-specific technology needs and assistance received from developed country Parties and the financial mechanism of the Convention and, as appropriate, on how they have utilized this assistance in support of the development and enhancement of endogenous capacities, technologies and know-how (“encouraged”); • Information on other relevant needs and/or areas for capacity-building other than those mentioned in decision 17/CP.8, annex, paragraphs 45, 47, 48 and 50 (“encouraged”).

3.2.7. TIMING, FREQUENCY AND FORMAT OF THE SUBMISSION

These reporting requirements on the format submission are described in decision 2/CP.17, annex III, paragraphs 17 to 19.

Non-Annex I Parties, consistent with their capabilities and the level of support provided for reporting, should submit their first biennial update report by December 2014 and every two years thereafter. The LDCs and SIDs may submit BURs at their discretion.

For the year in which the submission of a BUR coincides with the submission of the national communication, it can be submitted either as a summary of parts of the national communication or as a stand-alone report.

The BURs should be communicated to the COP, through the secretariat, in a single document, in electronic format, and in English or any one of the official United Nations languages.

Additional or supporting information may be supplied through other documents, such as a technical annex.

Table 6 summarizes the key aspects relating to timing and format of the submission of biennial update reports and national communications.

Table 6

Comparison of submission timing and format in the national communication guidelines and the biennial update report guidelines

Biennial update reports	National communications
First one due by December 2014 and every two years thereafter	Every four years
Stand-alone update report or a summary of parts of the national communication in the year in which submissions of the national communication and biennial update report coincide	Stand-alone report
A single document, in one of the official United Nations languages; an executive summary of no more than 10 pages shall be translated into English and made publicly available	A single document, in an electronic format and in English or any one of the official United Nations languages
Technical annexes can be submitted as a separate document	Technical annexes can be submitted as a separate document

4. INTERNATIONAL CONSULTATION AND ANALYSIS

4.1. INTRODUCTION

At COP 16 in 2010, Parties decided to conduct ICA of BURs from developing country Parties under the SBI.¹⁰

The ICA process is embedded within the context of mitigation actions for developing countries and the MRV framework established to support such actions. Mitigation actions for developing countries are already part of the Convention, which calls on all Parties to implement measures to mitigate climate change “taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances”.¹¹

This process will occur in two parts, through technical analysis of the BUR by a team of technical experts and a facilitative sharing of views among Parties, and will result in a summary report and a record of the facilitative sharing of views.¹²

The contents of this chapter provide details on the principles, objectives, modalities and guidelines for ICA, including the technical analysis of BURs and the facilitative sharing of views.

This chapter covers modalities and procedures of the team of technical experts undertaking technical analysis of BURs, and this is one of the core elements of this training programme.

4.2. PRINCIPLES

The conduct of the ICA of BURs from non-Annex I Parties will be underpinned by two key principles:

- a) The ICA will be conducted in a manner that is non-intrusive, non-punitive and respectful of national sovereignty;
- b) Discussion on the appropriateness of domestic policies and measures planned or implemented as mitigation actions is not part of the ICA process.

¹⁰ Decision 1/CP.16, paragraph 63.

¹¹ UNFCCC Convention, Article 4.1 b.

¹² Decision 2/CP.17, annex IV, paragraph 1.

4.3. OBJECTIVE

This process aims to increase the transparency of mitigation actions and their effects.

4.4. PROCESS, INPUT AND OUTCOME

As per the modalities and guidelines for ICA contained in annex IV of decision 2/CP.17, the ICA process will consist of two steps:

- a) A technical analysis of the BUR by a TTE;
- b) A facilitative sharing of views in the form of a workshop under the SBI, which will have the BUR and the summary report as an input.

The first rounds of ICA will be initiated within six months of the submission of the first round of BURs by developing country Parties with the technical analysis of BURs as the first step of the ICA process.

The frequency of participation in subsequent rounds of ICA by developing country Parties is determined by the frequency of the submissions of the subsequent BURs, which is every two years after the submission of its first BUR, with special flexibility for SIDs and LDCs. SIDs and LDCs may undergo ICA as a group of Parties at their discretion.

4.4.1. STEP 1: TECHNICAL ANALYSIS OF BIENNIAL UPDATE REPORTS

The technical analysis of BURs will be undertaken by a TTE. Additional technical information may be provided by the Party concerned. Prior to finalizing the report, the draft summary report prepared by the TTE will be shared with the Party concerned for review and comment. The summary report, incorporating comments from the Party, shall be finalized in consultation with the Party concerned and be presented to the SBI, which will take note of the summary report in its conclusions. The finalized summary report will also be made publicly available on the UNFCCC website.

The scope of the technical analysis and the role of the team of technical experts for undertaking the technical analysis of the BUR is elaborated in detail in Chapter 5.

4.4.2. STEP 2: FACILITATIVE SHARING OF VIEWS

The SBI shall, at regular intervals, convene a workshop for the facilitative sharing of views, open to all Parties, for all Parties for which there is a BUR and a final summary report. Parties will be allowed to submit written questions in advance.

The facilitative sharing of views among Parties will consist of a one- to three-hour session for each Party or group of Parties. Parties may request to go individually or in a group of up to five Parties. The session will consist of a brief presentation by the Party or Parties concerned on their BUR, followed by oral questions and answers

among Parties. The outcomes of this step will be captured as a record of the facilitative sharing of views.¹³

4.4.3. OUTCOME

The outcome of the ICA will be a summary report and a record of the facilitative sharing of views.

The input and outcome of each of these steps is summarized in table 7 below.

Table 7
Input, steps and outcomes of the international consultation and analysis process

Input	International consultation and analysis steps	Outcome
<ul style="list-style-type: none">• Biennial update report (BUR)	Step 1: a technical analysis of the BUR by a team of technical experts	<ul style="list-style-type: none">• Summary report
<ul style="list-style-type: none">• Biennial update report• Summary report	Step 2: a facilitative sharing of views	<ul style="list-style-type: none">• Record of the facilitative sharing of views

¹³ Decision 2/CP.17, annex, paragraph 7 and 8

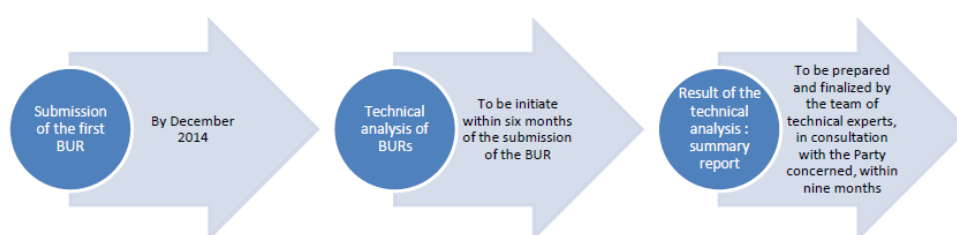
5. COMPOSITION, MODALITIES AND PROCEDURES OF THE TEAM OF TECHNICAL EXPERTS UNDERTAKING THE TECHNICAL ANALYSIS

The TTE will conduct the technical analysis of a BUR in accordance with the modalities and procedures defined in the annex to decision 20/CP.19.

As indicated in Chapter 4 (and illustrated in figure 1), the technical analysis of a BUR, as a first step of the ICA process, will be initiated for a non-Annex I Party within six months of submission of its BUR.

Figure 1

The process and timeline for technical analysis of a biennial update report



5.1. TEAM OF TECHNICAL EXPERTS

A TTE refers to a group of international experts nominated to the UNFCCC roster of experts by Parties. Only those experts that successfully completed this training programme will be eligible to participate in the technical analysis. A team will be selected and composed by the secretariat, taking into account the following criteria:

- The overall composition of the expertise of the team should cover the areas of information contained in the BUR, and as outlined in decision 2/CP.17, annex IV, paragraph 3(a) taking into account the national circumstances of the Party concerned;
- A TTE shall include, as a high priority and to the extent available, at least one CGE member and up to one third of the TTE can be made up of CGE members;
- Overall composition of the TTEs should be such that the majority of experts come from non-Annex I Parties;
- The composition of the team should aim for geographical balance among the experts selected from non-Annex I and Annex I Parties;
- Experts shall neither be a national of the Party whose BUR is under analysis nor be nominated by that Party, nor have been involved in the preparation of the BUR under analysis;

- f) The same TTE shall not be involved in undertaking the technical analysis of successive BURs from the same Party.

A TTE shall be co-led by two experts, one from an Annex I Party and another from a non-Annex I Party. The exact number of the members to be included in a TTE is not clearly set in the decision. This is to allow for flexibility in the composition of the teams on a case by case basis.

The CGE is mandated to provide periodic advice to the secretariat to assist in fulfilling the criteria listed above. To that effect, the secretariat is required to submit a report to the CGE on the composition of the TTEs on a semi-annual basis.

Further, the secretariat is mandated to manage the nominations of experts from Parties to the UNFCCC roster of experts, including receiving the nominations, and maintaining and updating the UNFCCC roster of experts.

5.2. SCOPE OF THE TECHNICAL ANALYSIS

The information considered should include the national GHG inventory report; information on mitigation actions, including a description of such actions, an analysis of their impacts and the associated methodologies and assumptions, and the progress made in their implementation; and information on domestic MRV and on support received. Additional technical information may be provided by the Party concerned.

In conducting the technical analysis, the TTE shall be responsible for the following:

- a) Identifying the extent to which the elements of information listed in paragraph 3(a) of the guidelines contained in annex IV of decision 2/CP.17 are included in the BUR of the Party concerned;
- b) Undertaking a technical analysis of information contained in the BUR as outlined in the BUR guidelines contained in annex III to decision 2/CP.17, and any additional technical information that may be provided by the Party concerned;
- c) Identifying, in consultation with the Party concerned, capacity-building needs in order to facilitate reporting in accordance with annex III to decision 2/CP.17, and participating in international consultation and analysis in accordance with annex IV to decision 2/CP.17, taking into account Article 4, paragraph 3, of the Convention.

5.3. MODALITIES AND PROCEDURES

As per the adopted modalities and procedures, the TTE will conduct technical analysis of BURs in a single location. A TTE may analyse several BURs in a series of separate technical analyses. SIDs and the LDCs may undergo ICA as a group of Parties at their discretion.

The technical analysis of the BURs shall result in an individual summary report for each BUR submitted and analysed.

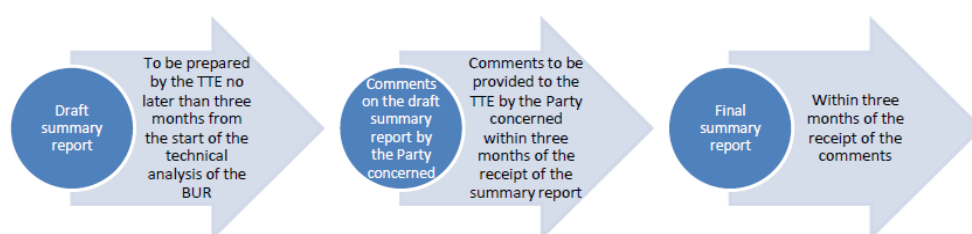
The TTE shall complete a draft of the summary report no later than three months after the start of the technical analysis. The draft summary report should be shared with the respective non-Annex I Party for review and comment, to be provided within three months of its receipt.

The TTE shall respond to and incorporate the comments referred to above from the Party concerned and finalize the summary report, in consultation with the Party concerned, within three months of the receipt of the comments.

The timeline for the preparation and finalization of the draft summary report is illustrated in figure 2 below.

Figure 2

The timeline for the preparation and finalization of the summary report capturing outcomes of the technical analysis



Abbreviations: BUR = biennial update report, TTE = team of technical experts.

The final summary report will be noted by the SBI in its conclusions and made publicly available on the UNFCCC website.

In the course of a technical analysis, additional technical information may be provided by the Party concerned to the TTE, as set out in decision 2/CP.17, annex IV, paragraph 4.

Where some of the additional technical information provided by the Party falls under confidentiality protection in accordance with the national legislation of the Party concerned, the confidentiality of this information shall be protected by the TTE.

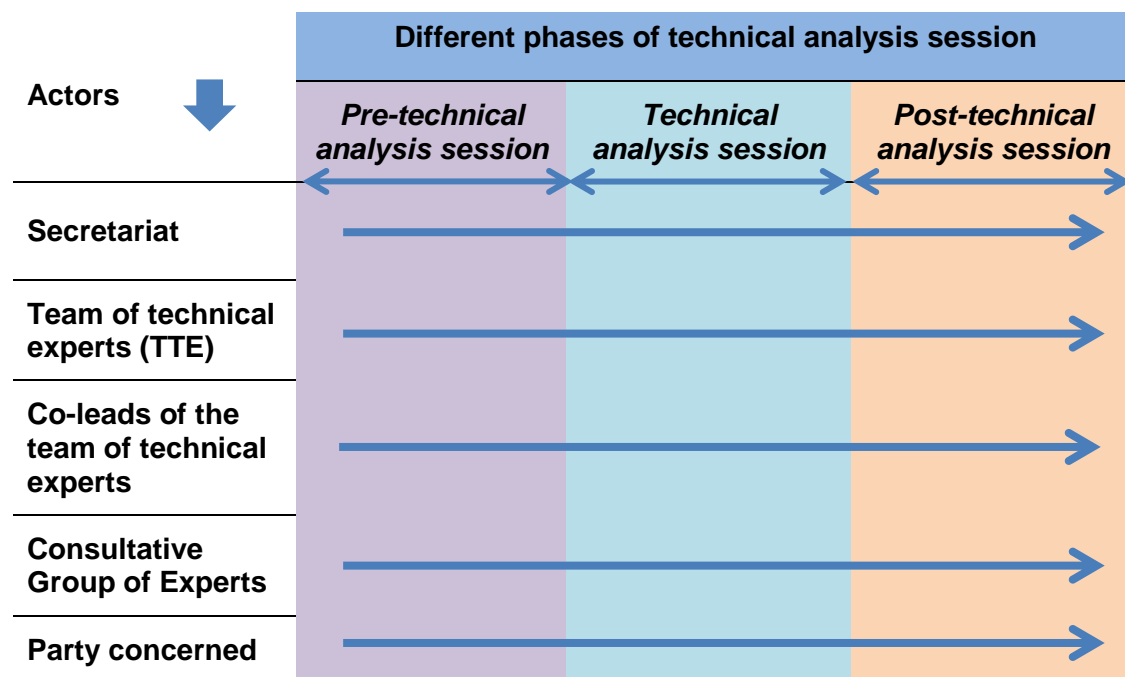
The obligation of a member of a TTE not to disclose confidential information referred to above shall continue after termination of his or her service on the TTE.

5.4. ROLES AND RESPONSIBILITIES OF ACTORS INVOLVED IN THE TECHNICAL ANALYSIS OF BIENNIAL UPDATE REPORTS

Undertaking the technical analysis of BURs, and preparing and finalizing the summary report is the collective responsibility of the TTE, coordinated by the co-leads, with support from the secretariat, as well as the Party concerned. Therefore, defining the roles and responsibilities of each of these actors is important.

As contained in the relevant decisions,¹⁴ in one complete session of the process of conducting the technical analysis of BURs under the ICA, there are three distinct stages involving at least five key actors with distinct roles and responsibilities: the secretariat; a TTE, including the co-leads; the Party whose BUR is subjected to the technical analysis; and the CGE (see figure 3). The roles and responsibilities of each of these actors at different stages are elaborated below.

Figure 3
Actors and their involvement in the technical analysis of a biennial update report



Note: Technical analysis session refers to a session where the TTE will meet in a single location for a period of five working days to analyse 3–4 biennial update reports.

The “pre-technical analysis session phase” refers to a period from the time a BUR is submitted by a non-Annex I Party to the technical analysis session (defined below). This phase mainly relates to identifying the BURs for technical analysis, mobilizing and planning resources required for the conduct of the technical analysis, and establishing contact with the Parties concerned to ensure that they are informed well in advance.

The “technical analysis session phase” refers to a session where the TTE will meet in a single location for a period of five working days to analyse 3–4 BURs.

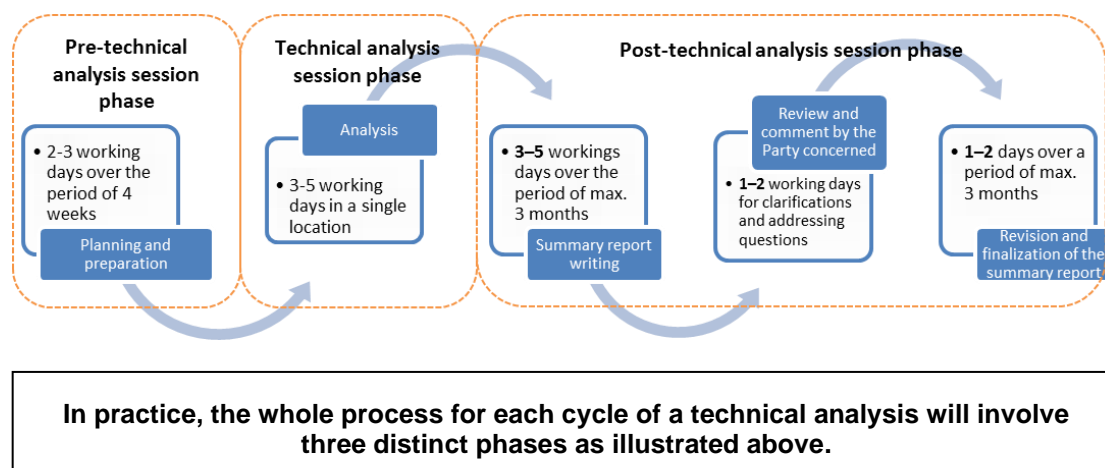
The “post-technical analysis session phase” refers to the period from when a BUR has been analysed to the time when the summary report is finalized and published on the UNFCCC website. The time and effort in this phase relate mainly to preparing a draft summary report, sharing, receiving and addressing the comments and

¹⁴ Decisions 1/CP.16; 2/CP.17 and 20/CP.19.

feedback from the Party concerned, and finalizing, in consultation with the Party concerned, the summary report.

The tasks involved in each phase along with the estimates of efforts required, in working days, is illustrated in figure 4.

Figure 4
The process of a cycle of a technical analysis



5.4.1. SECRETARIAT

The secretariat plays a key role in the conduct of the technical analysis of BURs by providing administrative as well as technical support to the TTE.¹⁵ These responsibilities are in addition to the technical and administrative support provided to the CGE, in implementing its mandated activities,¹⁶ including the development and delivery of the training programme on the technical analysis for experts nominated to the UNFCCC roster of experts.

The specific roles and responsibilities of the secretariat in each of these phases include the following:

5.4.1.1. Pre-technical analysis session phase

- a) Composing the TTE, under the general guidance of the CGE, on the basis of the selection criteria listed in decision 20/CP.19, annex, paragraphs 3–6 (see Chapter 5.1), (at least five weeks in advance of the session¹⁷);
- b) Asking the experts selected to be members of a TTE, to sign an Agreement for Expert Services, which among other things, addresses the issue of protecting information deemed confidential, as well as conflicts of interest;

¹⁵ Decision 20/CP.19, annex, paragraph 2.

¹⁶ Decision 19/CP.19, paragraphs 9 (a-e).

¹⁷ Session here refers to a period of 5 working days where the TTE will meet in a single location several BURs in a series of separate technical analyses.

- c) Providing the TTE with the background materials relevant for the technical analysis of BURs (at least four weeks);
- d) Establishing contact with the Party concerned whose BUR will be subject to the technical analysis. This includes identifying a focal point in the country who shall be the point of communication with the Party concerned;
- e) Assisting the TTE and the co-leads in preparing an informal workplan for the team;
- f) Developing appropriate tools that will facilitate the conduct of the technical analysis;

5.4.1.2. Technical analysis session phase

- a) Providing administrative and technical support to the TTE during the conduct of the technical analysis as well as preparing the summary report;

5.4.1.3. Post-technical analysis session phase

- a) Acting as an interface between the TTE and the Party concerned – all communication between the TTE and the Party concerned will be facilitated by the secretariat;
- b) Receiving the draft summary report from the TTE and sharing it with the Party concerned;
- c) Receiving comments from the Party concerned on the draft summary report, and assisting the TTE and the Party concerned in addressing the comments and finalizing the summary report;
- d) Making the final summary reports available to the SBI for it to note and also hosting them on the secretariat's website.

5.4.2. TEAM OF TECHNICAL EXPERTS

The TTE, consisting of a group of international experts and serving in their personal capacity, will gather in a single location to analyse 2–4 BURs in one series.¹⁸ The TTE is also responsible for preparing and finalizing, in consultation with the Party concerned, the summary report capturing the results of the technical analysis.¹⁹ Some of the key roles and responsibilities, in the process of conducting technical analysis and preparing a summary report, include:

5.4.2.1. Pre-technical analysis session phase

- a) Signing an agreement with the secretariat for the expert services;
- b) Establishing contact with the rest of the team members;

¹⁸ Decision 20/CP.19, annex, paragraphs 6–7.

¹⁹ Decision 20/CP.19, annex, paragraph 15 (a–c).

- c) Familiarizing themselves with the background materials made available to the team;
- d) Understanding the scope of the technical analysis;
- e) Coming to a common understanding and, led by the co-leads and assisted by the secretariat, agreeing to an informal work plan that allows the team to prioritize and focus its work, while at the same time taking into account the following:
 - i) The number and size of the BURs to be analysed;
 - ii) The composition and expertise of the members of the TTE;
 - iii) The amount of the time that each member of the TTE has been allotted to work on the analysis.

5.4.2.2. Technical analysis session phase

- a) Conducting the technical analysis of the BURs in a single location (for a detailed explanation of the roles of the TTE conducting the technical analysis, please see Module 2 of the training materials);
- b) Ensuring that the agreed deliverable timelines to conduct the technical analysis, including preparing, reviewing, finalizing and submitting the summary report, are fully respected and honoured;
- c) Capturing the outcomes of the technical analysis in the relevant parts of the draft summary report;

5.4.2.3. Post-technical analysis session phase

- a) Completing, reviewing and finalizing the draft summary report;
- b) Liaising with the co-leads and the secretariat to receive and address comments from the Party concerned on the draft summary report;
- c) Finalizing, in consultation with the Party concerned, the summary report.

5.4.3. CO-LEADS OF THE TEAM OF TECHNICAL EXPERTS

The co-leads of a TTE should ensure that the technical analyses in which they participate and lead are performed in accordance with the relevant decisions.²⁰ In their capacity, the co-leads would also need to provide leadership to the team and be responsible for overall coordination and functioning of the team. Some of the key responsibilities include:

5.4.3.1. Pre-technical analysis session phase

- a) Leading the preparation of a workplan for the technical analysis activities and prioritizing the team's work;

²⁰ Decision 2/CP.17, annexes III and IV, and decision 20/CP.19 and its annex.

- b) Organizing the work of the team, including distribution of the task among team members;
- c) Verifying that the TTE members have all the necessary information provided by the secretariat prior to the start of the technical analysis;

5.4.3.2. Technical analysis session phase

- a) Guiding the technical analysis activities by providing technical advice to other team members and ensuring that it is done in a manner that is consistent with the relevant guidelines and decisions;
- b) Monitoring the progress of the technical analysis activities and ensuring that necessary input from the team members is received and the planned activities are completed in a timely manner;
- c) Conducting/leading the daily recap/stocktaking meetings at the end of each day;
- d) Making a decision on disagreement or conflicting situations in the team (see Chapter 6.4 for further details);

5.4.3.3. Post-technical analysis session phase

- e) Ensuring that there is good communication between members of the team as well as with the secretariat and the Party concerned (through the secretariat);
- f) Coordinating and ensuring that input from the team members on the draft summary report is provided in a timely manner;
- g) Finalizing the draft summary report and forwarding it, through the secretariat, to the Party concerned for its review and comments;
- h) Reviewing the comments from the Party and assigning it/them to the respective team members for their necessary action;
- i) Coordinating appropriate responses to any question(s) that the Party concerned may have on the draft summary report;
- j) Finalizing the summary report taking into account the feedback and comments from the Party concerned.

5.4.4. THE PARTY CONCERNED

The direct and active involvement of the Party concerned in this process starts from the moment the TTE completes and shares the draft summary report for review and comment.²¹ It will also be engaged over the course of finalizing the summary report. Further, in the course of the technical analysis, it may also choose to, on a fully voluntary basis, provide additional technical information to the TTE through the secretariat. If such information falls under the confidentiality protection under its national legislation, then it is important that the Party declares it as such. The TTE is

²¹ Decision 20/CP.19, annex, paragraph 9.

obliged to protect such confidentiality. This obligation extends even upon termination of the TTE's services.²²

5.4.5. CONSULTATIVE GROUP OF EXPERTS

The CGE is mandated to provide general guidance to the secretariat in selecting and composing the TTE, in accordance with decision 20/CP.19, annex, paragraphs 3–5, taking into account the reports provided by the secretariat in this regard, on a semi-annual basis.

It is also mandated to develop and organize an appropriate training programme for technical experts nominated to the UNFCCC roster of experts to participate in the technical analysis of BURs.

5.5. CAPTURING THE RESULTS OF THE TECHNICAL ANALYSIS IN THE SUMMARY REPORT

The outcome of the technical analysis of BURs under the ICA is captured in a summary report.

The structure of the summary report should clearly reflect the scope and mandate of the technical analysis, which are reproduced below for easy reference:

1. Identifying the extent to which the elements of information listed in paragraph 3(a) of the guidelines contained in annex IV of decision 2/CP.17 are included in the BUR of the Party concerned;
2. Undertaking a technical analysis of information contained in the BUR as outlined in the “UNFCCC biennial update reporting guidelines for Parties not included in Annex I to the Convention” contained in annex III to decision 2/CP.17, and any additional technical information that may be provided by the Party concerned;
3. Identifying, in consultation with the Party concerned, capacity-building needs in order to facilitate reporting in accordance with annex III to decision 2/CP.17, and participating in international consultation and analysis in accordance with annex IV to decision 2/CP.17, taking into account Article 4, paragraph 3, of the Convention.

Based on this rationale, an example structure of a summary report is provided in the box below.

²² Decision 20/CP.19, annex, paragraphs 12–14.

Box

Example of an outline of a summary report

Title of the report:

Summary report on the technical analysis of the [first] biennial update report of [Party] submitted on [Day/Month/Year]

Contents

	<i>Paragraphs</i>	<i>Page</i>
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A. Introduction	1–2	3
B. Process overview	3–6	3
II. Technical analysis of information reported in the biennial update report	7–34	3
A. Scope of the technical analysis.....	7–8	3
B. Overview of the elements of information reported	9–17	4
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D. Identification of capacity-building needs	34	13
III. Conclusions	35–36	13
Annex		
Documents and information used during the technical analysis		14

6. OTHER ELEMENTS THAT FACILITATE THE CONDUCT OF THE TECHNICAL ANALYSIS

The chapter outlines some of the elements that can facilitate the conduct of the technical analysis of BURs in an efficient and objective manner.

6.1. CROSS-CULTURAL LEARNING

Working in a multicultural environment within the TTE could be challenging as cultural differences can affect how the members work together. Avoiding misunderstandings and improving dialogue in such multicultural settings is possible by increasing the ability of the TTE to recognize cultural differences and make the necessary adjustments. This would involve experts learning of their own culture as well as of the other team members, being aware of the dynamics of the multicultural setting and practicing effective communication.

There are three basic phases which are necessary to enhance cultural learning and the competence of the experts to work in multicultural settings such as the TTE:

1. Developing awareness is a technique that prepares an expert for operating in a cross-cultural environment as it conditions them to be wary of their instincts and instils in them the habit of observing. This is important as culture affects how others think, organize and interact. It becomes difficult to work with others if a shared or mutually understood cultural experience is absent;
2. Acquiring knowledge in this context mandates learning about culture, traits, differences between groups and achieving effective cross-cultural communication:
 - i) A useful interpretation of culture is the shared assumptions, values and beliefs of a group of people that result in behaviours that are characteristic of this group. It influences how they interact with each other and others within their environment;
 - ii) It is worth remembering that people are a product of their culture and in some ways they are unique. Therefore it is important to remember that their culture affects their behaviour and how they take decisions;
 - iii) Effective cross-cultural communication is another important element in the functioning of the TTE. This helps team members to understand the core issues that can affect communication as well as to identify and deal with different styles of communication. Further, it would help the TTE to understand and learn to manage the challenges in communication.

There are skills that can improve the ability to function and communicate effectively in a multicultural setting and these include the ability to:

- a) Interact comfortably with people from different backgrounds;
- b) View the world from multiple perspectives;
- c) See beyond surface differences and characteristics;

- d) See a person as an individual rather than as a member of a group;
- e) See commonalities and create and be part of a safe environment where everyone is accepted;
- f) Work effectively as part of a team;
- g) Be aware of self and self-identity and have the ability to listen;
- h) Respect cultural and individual differences.

6.2. TEAM DYNAMICS

A successful TTE will depend on the capacity of team members to organize their tasks and create effective work interactions within the team.

This chapter discusses the importance of planning, commitment and promptness, as well as aspects of communication within the TTE. Information on avoiding common problems that may arise is also included.

The final output of the technical analysis, the summary report, is a task that is equally distributed among the team members and as such, there are various elements that contribute to its success.

Planning for the technical analysis ahead of the task is important as each team member would have their individual national responsibility, but would need to make time to conduct the technical analysis in a single location. This would involve:

1. Clarifying the scope of the technical analysis;
2. Performing the distribution of tasks according to the available expertise required to analyse the BUR;
3. Setting up timelines to conduct the technical analysis, including preparing, reviewing, finalizing and submitting the summary report;
4. Defining the procedure for communication between the team (such as email, telephone, etc.) and the timing, as well as with the Party whose BUR is being analysed;
5. Coordinating with the secretariat and preparation of the workplan reflecting these elements;
6. Promoting shared responsibility and the commitment of team members during the technical analysis is critical. Once an expert agrees to be part of the team, they are expected to make the time to analyse the allocated elements of the BUR, to ensure that deadlines are met and the work of the TTE is not delayed;
7. Completing the assigned tasks and delivering the output in a timely manner. The co-leads of the TTE, with the support of the secretariat, would need to set deadlines for the individual sections of the report. All experts need to be committed to meeting these deadlines and ensuring the quality of the technical analysis and the summary report is not compromised.

On occasion, problems may arise within the TTE and would require immediate resolution. The following are some problems that a TTE could encounter and approaches to prevention:

- a) Some members are spending less time and effort on the technical analysis. The cause of this problem could be the expert being new to the process, lack of understanding or some other problem that could prevent the expert from dedicating the time needed for the technical analysis. It could be best for the co-leads, under the guidance of the secretariat, to discuss the issues with the expert concerned;
- b) Lack of responses to emails. The possible causes could be the wrong email address, faulty internet connection or firewalls, and other circumstances that prevent the expert from reading their emails. Hence it is important that the member of the team shares up-to-date, as well as alternate, email addresses with the secretariat and the rest of the team. Experts on the TTE could establish timelines for responding, for example, within 48 hours of receipt of emails. The co-leads and the secretariat could also ensure that they acquire contact information other than emails;
- c) In some instances, findings from experts may be contradictory or they do not agree on the approach adopted for the technical analysis. This could result from legitimate differences of opinions or lack of communication. Experts need to ensure continuous communication as the preparation of the report is the collective responsibility of the team. It is also important to agree on the strategy to approach the technical analysis;
- d) The submissions of the different sections of the summary report are delayed and there is a possibility that it could adversely impact on the submission of the entire summary report. This problem could result from lack of organization within the team, lack of experience from some team members, lack of understanding of responsibility and other problems that adversely impact the pace of the expert's work. A realistic, practical and mutually agreed workplan that establishes deadlines and considers the experience of individual team members could be a possible solution to this problem. The co-leads can also avoid this problem by making periodic checks on the status of the work of the team members and providing encouragement to those, whom they identify, could be lagging behind.

6.3. INTERACTIONS WITH EXPERTS FROM PARTIES

Over the course of the technical analysis, the TTE may encounter difficulties in understanding the information in the BUR. They may, through the secretariat, want to address questions to Parties to seek clarification on information contained in the BUR. It is at the Party's discretion as to whether they provide such additional information. On such an occasion, the Party will not approach the team directly, but will provide the additional information through the secretariat.

The co-leads would then be given the information for sharing with the rest of the team. As a co-lead, there is a need to ensure that this information is communicated clearly to avoid any misunderstanding, including the confidentiality of the information provided by the Party.

6.4. DISAGREEMENT AND CONFLICT RESOLUTION

The TTE does not have experience in conducting the analysis since the ICA process has only recently been operationalized. However, similar activities have occurred and

as such, there are approaches to conflict resolution that could serve as best practice for the TTE.

This chapter provides some information on problems and suggests approaches that may be helpful to the work of the TTE, in resolving any disagreement and conflict.

During the technical analysis, disagreement or conflicting situations may occur. When these situations occur, it is useful to have skills and strategies that can be used to resolve and manage these situations, to reach consensus in an amicable and timely manner.

Disagreement between experts represents a difference of opinion, based on the personal orientation of team members, whereas conflict is a magnified disagreement. Once managed constructively, such occurrences should not affect the efficiency of the TTE in performing their tasks. The co-leads will take the decision on ways forward in case of disagreement. In successfully preventing and managing these occurrences, it is important for the co-leads to recognize the warning signs or the causes:

- a) Misinformation or lack of information where an expert does not have the full knowledge;
- b) Limited physical resources, organizational changes or external forces, which can be manifested in unequal distribution of work between experts;
- c) Different values, which could translate into different approaches to work and meeting deadlines, can also result in conflict during the technical analysis;
- d) Relationships, such as strong negative emotions, miscommunications, stereotypes or repeated negative behaviours can be a source of conflict. This can occur, for example, when a co-lead continuously imposes their views because of the perception that the other co-lead is not efficient.

This list is not exhaustive, but whatever the nature of disagreement or conflict, resolution is necessary to ensure that the situation does not become an impediment to the work of the TTE in conducting the technical analysis. In addition to identifying the cause or signs of conflict, it is important to draw upon your cultural learning and practise good communication skills:

- a) Experts should be aware of differences in cultural background and how this can influence communication styles and attitudes towards disagreement and conflict;
- b) Experts should take into consideration that other experts may judge or evaluate the message they receive.

It is therefore important to articulate your message clearly, solicit feedback to ensure that the receiver has clearly understood your message, be a good listener and provide feedback about the message, to engage in relevant discussions.

When these and other situations occur, the goal should be resolution, which could also involve the co-leads and the secretariat. It is important to solve any problems as quickly as possible.

GLOSSARY

Adaptation: Initiatives and measures to reduce the vulnerability of natural and human systems against actual or expected climate change effects.

Adverse effects of climate change: Changes in the physical environment or biota resulting from climate change which have significant deleterious effects on the composition, resilience or productivity of natural and managed ecosystems or on the operation of socioeconomic systems or on human health and welfare.

Annex I Parties: Parties included in Annex I to the Convention that were members of the Organisation for Economic Co-operation and Development in 1992, plus countries with economies in transition, including the Russian Federation, the Baltic States, and several Central and Eastern European States.

Annex II Parties: Consist of the Organisation for Economic Co-operation and Development members of Annex I, but not the countries with economies in transition. They are required to provide financial resources to enable developing countries to undertake emissions reduction activities under the Convention and to help them adapt to adverse effects of climate change. In addition, they have to "take all practicable steps" to promote the development and transfer of environmentally friendly technologies to countries with economies in transition and developing countries. Funding provided by Annex II Parties is channelled mostly through the Convention's financial mechanism.

Anthropogenic greenhouse emissions: Greenhouse gas emissions resulting from human activities.

Article 4.1: An article of the Convention stipulating general commitments assumed by all Parties, developing or developed.

Article 12.1: An article of the Convention that describes the how Parties are to communicate information related to implementation of the Convention.

Biennial update reports (BURs): A report submitted by Parties not included in Annex I to the Convention, which provides updates on actions undertaken by the Party to implement the Convention, including the status of its greenhouse gas emissions and removals by sinks, as well as actions to reduce emissions or enhance sinks.

Bunker fuels: A term used to refer to fuels consumed for international marine and air transport.

Capacity-building: In the context of climate change, the process of developing the technical skills and institutional capability in developing countries and economies in transition, to enable them to address and report effectively on the implementation of the Convention.

Climate change: A change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.

Conference of the Parties (COP): The supreme body of the Convention. It currently meets once a year to review the Convention's progress. The word 'conference' is not used here in the sense of 'meeting' but rather of 'association'. The 'Conference' meets in sessional periods, for example, the 'fourth session of the Conference of the Parties'.

Consultative Group of Experts on National Communications from non-Annex I Parties (CGE): An expert group constituted under the Convention, with representation from Annex I and non-Annex I Parties as well as relevant international organizations, to provide technical advice and support to non-Annex I Parties on the process of and preparation of national communications and biennial update reports and also build the capacity of technical experts nominated by Parties to undertake technical analysis of biennial update reports under the international consultation and analysis process.

Emissions: The release of greenhouse gases and/or their precursors into the atmosphere over a specified area and period of time.

Entry into force: The point at which an intergovernmental agreement becomes legally binding – occurring at a pre-stated interval after a pre-stated and required number of ratifications by countries has been achieved. The Climate Change Convention required 50 ratifications to enter into force. It now enters into force for each new Party 90 days after that Party ratifies the Convention.

Financial mechanism: An arrangement under the Convention and the Kyoto Protocol to provide funds to developing country Parties, through the provision of financial resources by the developed country Parties that are Annex II Parties to the Convention, to assist developing country Parties implement the Convention. The Parties to the Convention assigned operation of the financial mechanism to the Global Environment Facility and more recently, the Green Climate Fund, both of which are accountable to the Conference of the Parties.

Global warming potential (GWP): An index representing the combined effect of the differing times greenhouse gases remain in the atmosphere and their relative effectiveness in absorbing outgoing infrared radiation.

Green Climate Fund (GCF): At COP 16 in Cancun in 2010, governments established a Green Climate Fund as an operating entity of the financial mechanism of the Convention under Article 11. The GCF will support projects, programmes, policies and other activities in developing country Parties. The Fund will be governed by the GCF Board.

Greenhouse gases (GHGs): The atmospheric gases responsible for causing global warming and climate change. The major GHGs are carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O). Less prevalent – but very powerful – GHGs are hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride (SF₆).

Implementation: Actions (legislation or regulations, judicial decrees, or other actions) that governments take to translate international accords into domestic law and policy.

Intergovernmental Panel on Climate Change (IPCC): Established in 1988 by the World Meteorological Organization and the United Nations Environment Programme, the IPCC surveys worldwide scientific and technical literature and publishes

assessment reports that are widely recognized as the most credible existing sources of information on climate change. The IPCC also works on methodologies and responds to specific requests from the Convention's subsidiary bodies. The IPCC is independent of the Convention.

International consultation and analysis (ICA): A process under the Convention, whereby the biennial update reports from developing country Parties are considered, through a technical analysis and a facilitative sharing of views, in manner that is non-intrusive, non-punitive and respectful of national sovereignty. It aims to increase transparency of mitigation actions and their effects.

Kyoto Protocol: An international agreement standing on its own, and requiring separate ratification by governments, but linked to the UNFCCC. The Kyoto Protocol, among other things, sets binding targets for the reduction of greenhouse gas emissions by industrialized countries.

Land use, land-use change, and forestry (LULUCF): A greenhouse gas inventory sector that covers emissions and removals of greenhouse gases resulting from direct human-induced land use, land-use change and forestry activities.

Least Developed Countries (LDCs): The world's poorest countries. The criteria currently used by the Economic and Social Council for designation as an LDC include low income, human resource weakness and economic vulnerability. Currently 48 countries have been designated by the United Nations General Assembly as LDCs.

Measurement, reporting and verification (MRV): A process/concept that entails reporting by Parties on their actions to implement the Convention, which are subjected to international verification, with a view to facilitate discussions on such implementation. The reporting and verification are undertaken on the basis of relevant guidelines adopted by the Conference of the Parties.

Meeting: A formal gathering that occurs during a 'session'. Each session of the Conference of the Parties, for example, is divided into a number of meetings. A meeting is generally scheduled from 10 a.m. to 1 p.m. or from 3 p.m. to 6 p.m.

Mitigation: In the context of climate change, a human intervention to reduce the sources or enhance the sinks of greenhouse gases. Examples include using fossil fuels more efficiently for industrial processes or electricity generation, switching to solar energy or wind power, improving the insulation of buildings, and expanding forests and other 'sinks' to remove greater amounts of carbon dioxide from the atmosphere.

Montreal Protocol: The Montreal Protocol on Substances that Deplete the Ozone Layer, an international agreement adopted in Montreal in 1987.
National communication: A document submitted in accordance with the Convention (and the Protocol) by which a Party informs the Conference of the Parties of activities undertaken to address climate change. Most developed countries have now submitted their fifth national communications; most developing countries have completed their second national communication and are in the process of preparing their third.

Nationally appropriate mitigation actions (NAMAs): At COP 16 in Cancun in 2010, it was agreed that developing countries will undertake nationally appropriate mitigation actions in the context of sustainable development, supported and enabled by technology, financing and capacity-building, aimed at achieving a deviation in greenhouse gas emissions relative to 'business as usual' emissions in 2020.

Non-Annex I Parties: Parties not included in Annex I to the Convention, who are mostly developing countries.

Party: A state (or regional economic integration organization such as the European Union) that agrees to be bound by a treaty and for which the treaty has entered into force.

Protocol: An international agreement linked to an existing convention, but as a separate and additional agreement which must be signed and ratified by the parties to the convention concerned. Protocols typically strengthen a convention by adding new, more detailed commitments.

Ratification: Formal approval, often by a Parliament or other national legislature, of a convention, protocol or treaty, enabling a country to become a Party. Ratification is a separate process that occurs after a country has signed an agreement. The instrument of ratification must be deposited with a 'depository' (in the case of the Climate Change Convention, the United Nations Secretary-General) to start the countdown to becoming a Party (in the case of the Convention, the countdown is 90 days).

Recommendation: A formal act of the Conference of the Parties or the meeting of the Parties to the Kyoto Protocol which is weaker than a decision or a resolution, and is not binding on Parties to the Convention or the Kyoto Protocol.

REDD: Reducing emissions from deforestation and forest degradation in developing countries.

Research and systematic observation: An obligation of Parties to the Climate Change Convention; they are called upon to promote and cooperate in research and systematic observation of the climate system, and called upon to aid developing countries to do so.

Roster of experts: A roster that contains information on experts, who are nominated by their respective governments, through the National Focal Points of the Parties under the UNFCCC, to contribute to a number of processes mandated by the Conference of the Parties, the meeting of the Parties to the Kyoto Protocol, and the subsidiary bodies. These processes, among others, include the reviews of annual submissions of greenhouse gas inventories, reviews of national communications and biennial reports submitted by Annex I Parties and technical analysis under the international consultation and analysis process of biennial update reports submitted by non-Annex I Parties.

Sink: Any process, activity or mechanism which removes a greenhouse gas, an aerosol or a precursor of a greenhouse gas from the atmosphere.

Small island developing states: Low-lying coastal nations that are among the most vulnerable to the adverse effects of climate change.

Source: Any process or activity which releases a greenhouse gas, an aerosol or a precursor of a greenhouse gas into the atmosphere.

Subsidiary body: A committee that assists the Conference of the Parties. Two permanent subsidiary bodies are created by the Convention: the Subsidiary Body for Implementation (SBI) and the Subsidiary Body for Scientific and Technological Advice (SBSTA).

Subsidiary Body for Implementation (SBI): The SBI makes recommendations on policy and implementation issues to the Conference of the Parties and, if requested, to other bodies.

Subsidiary Body for Scientific and Technological Advice (SBSTA): The SBSTA serves as a link between information and assessments provided by expert sources (such as the Intergovernmental Panel on Climate Change) and the Conference of the Parties, which focuses on setting policy.

Sustainable development: Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Team of technical experts (TTE): A team of technical experts drawn from the UNFCCC roster of experts, responsible for conducting the technical analysis of biennial update reports from non-Annex I Parties under the international consultation and analysis process.

Technology transfer: A broad set of processes covering the flows of know-how, experience and equipment for mitigating and adapting to climate change among different stakeholders.

Vulnerability: The degree to which a system is susceptible to, or unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate variation to which a system is exposed, its sensitivity and its adaptive capacity.

ANNEX I

DETAILED EXPLANATION OF ELEMENTS CONTAINED IN THE GUIDELINES FOR THE PREPARATION OF NATIONAL COMMUNICATIONS

This annex elaborates on the information to be reported in national communications. In addition to reporting requirements, it also covers methodological aspects addressed in the “Guidelines for the preparation of national communications from Parties not included in Annex I to the Convention” (hereinafter referred to as NC guidelines).

1. NATIONAL CIRCUMSTANCES

Information on national circumstances provides the opportunity for detailing the national or, as relevant, regional development priorities, objectives and circumstances that serve as the basis for addressing issues relating to climate change. This information is critical for understanding a country’s vulnerability, its capacity and its options for adapting to the adverse effects of climate change, as well as its options for mitigating its greenhouse gas (GHG) emissions within the broader context of sustainable development.

Information on national circumstances should be clearly linked to information provided in other chapters of the national communication. Consequently, all sections and subject areas should refer back to the national situation and development priorities.

Parties not included in Annex I to the Convention (Non-Annex I Parties) are encouraged to provide a summary of relevant information regarding their national circumstances, as appropriate, in tabular form.

According to the NC guidelines, the following information could be included to describe the national circumstances:

- c) Geographical characteristics: climate, forests, land use and other environmental characteristics;
- d) Population: growth rates, distribution, density and other vital statistics;
- e) Economy: gross domestic product, energy, transport, industry, mining, tourism, agriculture, fisheries, waste, health and the services sector;
- f) Education: scientific and technical research institutions;

- g) A description of existing institutional arrangements relevant to the preparation of their national communications, on a continuous basis.²³

The information to be included in national communications regarding national circumstances is described in decision 17/CP.8, annex, paragraphs 3–5.

1.1. NATIONAL GREENHOUSE GAS INVENTORY

The requirement to develop and communicate, to the extent its capacities permit, a national inventory of anthropogenic GHG emissions by sources, and removals by sinks, by developing countries (as well as developed countries) is inscribed in Article 4, paragraph 1(a), and Article 12, paragraph 1(a) of the Convention. The preparation and reporting of national GHG inventories by non-Annex I Parties is guided by provisions contained in decision 17/CP.8, annex, paragraphs 6–24.

1.2. INVENTORY YEARS

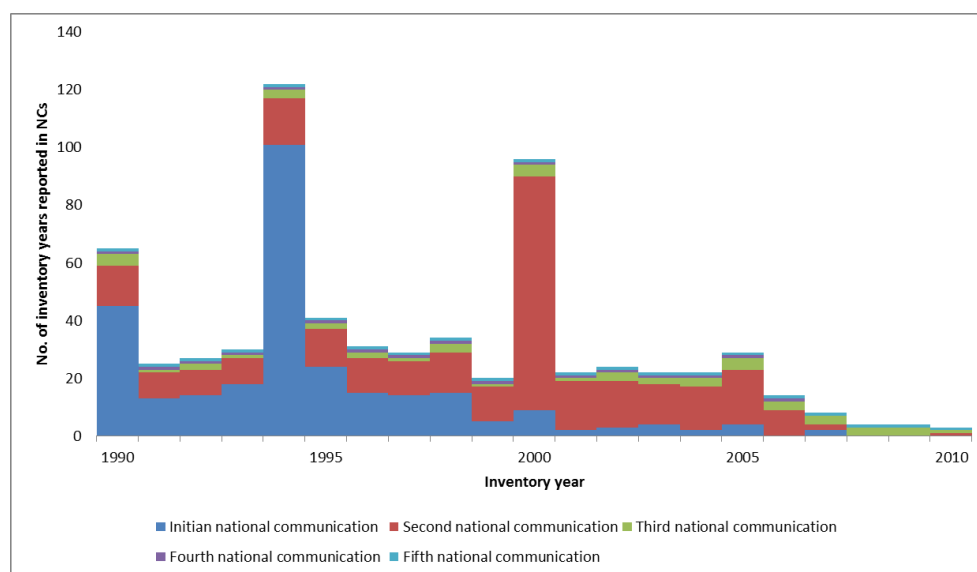
The NC guidelines explicitly define the mandatory year for which the GHG inventory is to be reported, to be included in initial and second rounds of national communications. For the initial national communication, the inventory year to be reported is 1994. Alternatively, Parties may also report data for 1990. For the second national communication, the inventory year to be reported is 2000. However, Parties that are least developed countries (LDC) can choose any year at their discretion.

If data, skills and resources are available, Parties could report consistent time series starting with the year(s) reported in their initial national communication up to and including the latest year(s) to be included in the latest round of the national communications, to the extent possible.

While conducting the subsequent rounds of GHG inventory, it is advisable to revise the data provided for the previous inventory year(s). Parties wishing to report for years other than 1990 or 1994 and 2000 are welcome to do so (see figure 5 below). This applies also to Parties that are preparing their first, third or subsequent national communications.

²³ Decision 17/CP.8, paragraph 5.

Figure 5
Inventory years reported in national communications



Abbreviation: NC = national communication.

1.3. METHODOLOGIES

According to the NC guidelines, non-Annex I Parties should use the *Revised 1996 Intergovernmental Panel on Climate Change (IPCC) Guidelines for National Greenhouse Gas Inventories* (hereinafter referred to as the Revised 1996 IPCC Guidelines). These are complemented by the IPCC's *Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (hereinafter referred to as GPG 2000) and *Good Practice Guidance for Land Use, Land-Use Change and Forestry*.

Although Parties should use the Revised 1996 IPCC Guidelines, there is also a recognition that some Parties, depending on the national circumstances and capabilities, may be using the *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. Please refer to Cluster 2, module 2.2f for a detailed overview of key differences between the Revised 1996 IPCC Guidelines and the 2006 IPCC Guidelines.

The IPCC inventory methodology is divided into various levels or tiers. Generally, the higher the number designating the tier, the more detailed is the methodology and the more accurate are the emission estimates. Tier 1 represents the minimum, or default, methodology. If sufficient data is available, a Party can also try to apply a higher tier. Tiers 2 and 3 involve more elaborate methods, which could be either source category-specific or technology based. These methods require more detailed and country specific data and/or measurements for their application.

In the case where a national methodology exists, is consistent with the IPCC guidelines and is transparent, it is highly advisable to use the national methodology. The national methodology used should be fully documented in order to allow the reader to understand why this particular method is better than the default one proposed by the IPCC.

The IPCC guidelines offer a default methodology, which includes default emission factors and in some cases default activity data. The default IPCC emission factors and activity data may not be appropriate for all countries. Hence, it is important to use country-specific or regional emission factors and activity data, if available, in order to reduce the uncertainty when estimating the emissions and removals.

When or if country-specific or regional activity data and emission factors are not available, it might be useful to start thinking about the potentials for synergy among the countries of the region and elaborate plans to develop such information, bearing in mind the need to better reflect the national circumstances in terms of emissions and removals. One comprehensive source is the emission factors database (EFDB)²⁴ submitted by users and reviewed by a team of international experts (EFDB Editorial Board). This database is maintained by the IPCC.

The formulation of cost-effective national or regional programmes aiming at the development or improvement of country-specific or regional emission factors and activity data can be a good way of dealing with the problem of the inappropriateness of emission factors and activity data.

1.4. KEY SOURCE ANALYSIS

Non-Annex I Parties are also encouraged, to the extent possible, to undertake any key source category analysis as indicated in GPG 2000 to assist in developing inventories that better reflect their national circumstances.

A key source category is one that is prioritized within the national inventory system, because its estimate has a major influence on a country's total inventory of direct GHGs in terms of absolute level of emissions, or trends in emissions, or both.

By identifying these key source categories in the national inventory, countries can prioritize their efforts to improve their overall estimates. Such a process will lead to improved quality, as well as greater confidence in the emissions estimates that are developed. It is good practice for each country to identify its national key source categories in a systematic and objective manner. GPG 2000 explains how key sources can be determined.

1.5. REPORTING

Parties provide information about the procedures and arrangements (e.g. institutional) established in order to sustain the process of data collection and archiving. This is intended to help make inventory preparation a continuous process.

It is important that Parties make every effort to report on three direct GHGs, carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O), and that this information be provided on a gas-by-gas basis (i.e. no single aggregate figure) in units of mass (the IPCC generally uses gigagram, i.e. 1,000 tonnes). This information will be included in

²⁴ <<http://www.ipcc-nggip.iges.or.jp/EFDB/main.php>>

table 1 of the annex to decision 17/CP.8 (see decision 17/CP.8, annex, paragraph 22).

Non-Annex I Parties are encouraged, as appropriate, to provide information on anthropogenic emissions by sources of other GHGs such as hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride (SF₆), carbon monoxide (CO), nitrogen oxides (NO_x), non-methane volatile organic compounds and sulphur oxides (SO_x).

Based on paragraph 18 of the non-Annex I Reporting guidelines (17/CP.8) "Non-Annex I Parties are encouraged, to the extent possible, and if disaggregated data are available, to estimate and report CO₂ fuel combustion emissions using both the sectoral and the reference approaches, and to explain any large differences between the two approaches." While this encourages Parties to report both reference and sectoral approaches (disaggregated data are available), non-Annex I Parties can report the reference approach only.

If Parties use both approaches to estimate CO₂ emissions from the energy sector and if there is a difference in the results obtained between the two approaches, it would be useful for Parties to explain and/or discuss this difference. This can help countries to further improve future GHG inventories by progressively reducing this level of uncertainty. It has to be noted that the reporting of both approaches is greatly facilitated by the use of the IPCC inventory software, which automatically summarizes this information.

When data on international bunker fuels is available, Parties should strive to report it, providing any breakdown of this information, as a memo item (these emissions are not included in the national total).

Non-Annex I Parties wishing to report on aggregated GHG emissions and removals expressed in CO₂ equivalents should use the global warming potential (GWP) values provided by the *IPCC Second Assessment Report: Climate Change 1995*²⁵ based on the effects of GHGs over a 100-year time horizon (i.e. 1 for CO₂, 21 for CH₄ and 310 for N₂O).

It is advisable that Parties describe as precisely as possible the sources of information (activity data and emission factors) and methodologies used, especially for country-specific sources and/or sinks which are not part of the IPCC guidelines. This contributes to the transparency of the information and helps the reader to understand what was done and how it was done. It is important for Parties to identify the data and methodological gaps and to make the link with further improvement to be achieved through capacity-building in order to facilitate additional requests for financial and technical assistance.

It is important that Parties use table 1 and table 2 contained in the annex to decision 17/CP.8. It is also advisable to read carefully the footnotes in table 1 and table 2. The notation keys to be used by Parties are the ones agreed to by the IPCC and are listed in the footnote to table 1. Use of notation keys other than those provided in the footnote might lead to an erroneous interpretation of the information presented within

²⁵ Available at <<https://www.ipcc.ch/pdf/climate-changes-1995/ipcc-2nd-assessment/2nd-assessment-en.pdf>>

the table. Particular attention should be paid as to how table 2 should be presented in order to suit the data available.

Non-Annex I Parties are encouraged to include in their national communications the inventory sectoral tables and worksheets,²⁶ which summarize the emissions by sectors, in both electronic and hard copy format.

Finally, GPG 2000 has substantially improved the methodology for calculating and managing uncertainties (see chapter 7 of GPG 2000). A major objective of the IPCC methodology is to help national experts reduce uncertainty in their GHG inventories to the minimum level possible. However, the approach also recognizes that uncertainties will remain despite these efforts, and that these uncertainties will vary widely. The provision of such information by the Party is intended to give the reader a better understanding of the information contained in the national GHG inventory.

The provision of this information is described in decision 17/CP.8, annex, paragraphs 6–24.

2. GENERAL DESCRIPTION OF STEPS TAKEN OR ENVISAGED TO IMPLEMENT THE CONVENTION

Each non-Annex I Party shall, in accordance with Article 12, paragraph 1(b) of the Convention, communicate to the Conference of the Parties (COP) a general description of steps taken or envisaged by the Party to implement the Convention, taking into account its common but differentiated responsibilities and its specific national and regional development priorities, objectives and circumstances.

Non-Annex I Parties may provide information on programmes containing measures to mitigate climate change by addressing anthropogenic GHG emissions and removals, and measures to facilitate adequate adaptation to climate change, following the provisions in the NC guidelines.

The provision of this information is described in of annex to decision 17/CP.8, annex, paragraphs 25–40.

2.1. MEASURES TO FACILITATE ADEQUATE ADAPTATION TO CLIMATE CHANGE

Each Party is required to communicate to the COP information on the general descriptions of steps taken or envisaged to formulate, implement, publish and regularly updating national and, where appropriate, regional programmes containing measures to facilitate adequate adaptation to climate change. They are also required to communicate, any other information they consider to be relevant to the achievement of the objective of the Convention and suitable for inclusion in their communications.

²⁶ The non-Annex I Greenhouse gas inventory software (NAIIS), available at <<http://unfccc.int/7627.php>>, provides for automated reporting in tables and worksheets.

In doing so, non-Annex I Parties should provide information on their vulnerability to the adverse effects of climate change, and on adaptation measures being taken to meet their specific needs and concerns arising from these adverse effects.

2.1.1. Methodological approaches

Non-Annex I Parties may use appropriate methodologies and guidelines they consider better able to reflect their national situation, for assessing their vulnerability and adaptation to climate change, provided that these methodologies and guidelines are consistent, transparent and well documented. Examples of such methodologies are included in the guidelines.

Non-Annex I Parties are encouraged to use, for the evaluation of adaptation strategies and measures, appropriate methodologies they consider better able to reflect their national situation, provided that these methodologies are consistent, transparent and well documented. Examples of such methodologies are included in the guidelines.

2.1.2. Reporting

Non-Annex I Parties are encouraged to provide:

- a) Information on the scope of their vulnerability and adaptation assessment, including identification of vulnerable areas that are most critical.
- b) A description of approaches, methodologies and tools used, including scenarios for the assessment of impacts of, and vulnerability and adaptation to, climate change, as well as any uncertainties inherent in these methodologies.
- c) Information on their vulnerability to the impacts of, and their adaptation to, climate change in key vulnerable areas. Information should include key findings, and direct and indirect effects arising from climate change, allowing for an integrated analysis of the country's vulnerability to climate change.
- d) Information on and, to the extent possible, an evaluation of, strategies and measures for adapting to climate change, in key areas, including those which are of the highest priority.

Where relevant, Parties may report on the use of policy frameworks, such as national adaptation programmes, plans and policies for developing and implementing adaptation strategies and measures.

Further, by decision 1/CP.10, non-Annex I Parties are encouraged to provide information on their specific needs and concerns arising from the adverse effects of climate change, including any gaps they identify in the implementation of decision 5/CP.7. Decision 5/CP.7 addresses the specific needs and concerns of developing country Parties referred to in Article 4, paragraph 8, of the Convention, and the specific needs and special situations of the least developed countries referred to in Article 4, paragraph 9.

2.2. MEASURES TO MITIGATE CLIMATE CHANGE

Similar to measures to facilitate adequate adaptation to climate change, each Party is required to provide to the COP information on the general descriptions of steps taken

or envisaged for formulating, implementing, publishing and regularly updating national and, where appropriate, regional programmes containing measures to mitigate climate change by addressing anthropogenic GHG emissions and removals, and any other information they consider to be relevant to the achievement of the objective of the Convention and suitable for inclusion in their communications.

Although developing countries are not required to take on emission reduction commitments, undertaking climate change mitigation and assessment could provide ancillary benefits for sustainable development, such as (but not limited to) particulate pollution reduction, an increase in technological efficiency and effectiveness, improvements in the security and availability of power supply, a reduction in road congestion when a shift from private to public transport takes place, and an increase in employment resulting from mitigation projects.

2.2.1. Methodological approaches

Based on national circumstances, non-Annex I Parties are encouraged to use whatever methods are available and appropriate in order to formulate and prioritize programmes containing measures to mitigate climate change (mitigation assessment); this should be done within the framework of sustainable development objectives, which should include social, economic and environmental factors.

Mitigation assessment should entail the generation of information on the national or regional analysis of the potential costs and impacts of the various technologies and practices to mitigate climate change. This information should be relevant for sustainable development and useful for policymakers, and should also help formulate and prioritize mitigation programmes, taking into account national circumstances and development priorities. It may be useful to describe how and by whom the mitigation assessment has been undertaken, and which sectors and gases were covered.

There are several methods and models that may be used in mitigation assessment, ranging from a broad description of main development trends and statistics to formalized modelling at sector and macro-economic levels, among other things. Examples of appropriate technical resources are included in the guidelines.

2.2.2. Reporting

Based on national circumstances, non-Annex I Parties are encouraged to provide, to the extent their capacities allow, information on programmes and measures implemented or planned which contribute to mitigating climate change by addressing anthropogenic GHG emissions and removals, including, as appropriate, relevant information by key sectors on methodologies, scenarios, results, measures and institutional arrangements.

Information on any mitigation projects that are being implemented or proposed could include information on funding resources needed as well as sources of the funds such as national government, and multilateral and bilateral programmes.

Further, by decision 1/CP.10, non-Annex I Parties are encouraged to provide information on their specific needs and concerns arising from the impacts of the implementation of response measures, including any gaps they identify in the implementation of decision 5/CP.7. Among other things, decision 5/CP.7 encourages non-Annex I Parties to provide information in their national communications on their

specific needs and concerns arising from the impact of the implementation of response measures, as well as existing and planned support programmes to meet the those specific needs and concerns.

3. OTHER INFORMATION CONSIDERED RELEVANT TO THE ACHIEVEMENT OF THE OBJECTIVE OF THE CONVENTION

The communication of other information considered relevant to the achievement of the objective of the Convention, as required by Article 12, paragraph 1(c), is guided by the provisions contained in paragraphs 41–48 of the NC guidelines²⁷ and includes the following:

- Integration of climate change considerations;
- Transfer of technologies;
- Research and systematic observation;
- Education, training and public awareness;
- Capacity-building;
- Information and networking.

3.1. INTEGRATION OF CLIMATE CHANGE CONSIDERATIONS

With a view to facilitating the formulation and implementation of sustainable development programmes, non-Annex I Parties are encouraged to provide information on any steps they have taken to integrate climate change considerations in relevant social, economic and environmental policies and actions in accordance with Article 4, paragraph 1(f) of the Convention.

3.2. TRANSFER OF TECHNOLOGIES

Pursuant to decision 4/CP.7, its annex, and the implementation of Article 4, paragraph 5, of the Convention, non-Annex I Parties are encouraged, in the light of their social and economic conditions, to provide information on activities relating to the transfer of, and access to, environmentally sound technologies and know-how; the development and enhancement of endogenous capacities, technologies and know-how; and measures relating to enhancing the enabling environment for development and transfer of technologies.

3.3. RESEARCH AND SYSTEMATIC OBSERVATION

Non-Annex I Parties are encouraged to provide information on:

- a) Climate change research and systematic observation, including their participation in and contribution to activities and programmes, as appropriate, of national, regional and global research networks and observing systems.

²⁷ Decision 17/CP.8, annex, paragraphs 41–48.

- b) Research relating to programmes containing measures to mitigate climate change, programmes containing measures to facilitate adequate adaptation to climate change, and the development of emission factors and activity data.

3.4. EDUCATION, TRAINING AND PUBLIC AWARENESS

Non-Annex I Parties are invited to provide information on activities relating to climate change education, training and public awareness.

3.5. CAPACITY BUILDING

Non-Annex I Parties are encouraged to:

- a) Provide, in accordance with decision 2/CP.7, information on how capacity-building activities, as contained in the framework annexed to that decision, are being implemented at national and, where appropriate, at subregional and/or regional levels. This could include, inter alia, options and priorities for capacity-building, participation in and promotion of South–South cooperation, the involvement of stakeholders in capacity-building, coordination and sustainability of capacity-building activities, and the dissemination and sharing of information on capacity-building activities.
- b) Include, as appropriate, information on national, subregional and/or regional capacity-building activities for integrating adaptation to climate change into medium and long-term planning.

3.6. INFORMATION AND NETWORKING

Non-Annex I Parties are encouraged to provide information on their efforts to promote information sharing among and within countries and regions. Information could cover, as appropriate, participation in and contribution to networks, and access to, and use of, information technologies for information exchange.

4. CONSTRAINTS AND GAPS, AND RELATED FINANCIAL, TECHNICAL AND CAPACITY NEEDS

It is widely recognized under the Convention that non-Annex I Parties, while undertaking activities, measures and programmes to implement the Convention and to prepare the national communication, continue to face difficulties, constraints and gaps relating to financial, technical and capacity needs.

The provision of this information is described in decision 17/CP.8, annex, paragraphs 49–55.

4.1. CONSTRAINTS AND GAPS, AND ASSOCIATED FINANCIAL, TECHNICAL AND CAPACITY NEEDS

Non-Annex I Parties should, in accordance with national circumstances and development priorities, describe any constraints and gaps, and related financial, technical and capacity needs, as well as proposed and/or implemented activities for overcoming the gaps and constraints, associated with the implementation of activities, measures and programmes envisaged under the Convention, and with the preparation and improvement of national communications on a continuous basis.

4.2. SUPPORT RECEIVED

Non-Annex I Parties should provide information on financial resources and technical support provided by themselves, as well as those received from the Global Environment Facility (GEF), Annex II Parties or bilateral and multilateral institutions for:

- Activities relating to climate change;
- The preparation of their national communications.

4.3. PROPOSED MITIGATION PROJECTS FOR FINANCING

Non-Annex I Parties are encouraged to provide, to the extent their capacities permit, a list of projects proposed for financing, in accordance with Article 12, paragraph 4, of the Convention, in preparation for arranging the provision of technical and financial support.

Article 12, paragraph 4 allows developing countries to, on a voluntary basis, propose projects for financing, including specific technologies, materials, equipment, techniques or practices that would be needed to implement mitigation projects, along with, if possible, an estimate of all incremental costs, of the reductions of emissions and increments of removals of GHGs, as well as an estimate of the consequent benefits.

4.4. IMPLEMENTATION OF ADAPTATION MEASURES

Non-Annex I Parties may include information on opportunities for the implementation of adaptation measures, including pilot and/or demonstration adaptation projects, being undertaken or proposed. They may also provide information on barriers to the implementation of adaptation measures. They may include, as appropriate, information on how support programmes from Parties included in Annex II to the Convention are meeting their specific needs and concerns relating to vulnerability and adaptation to climate change.

4.5. TRANSFER OF TECHNOLOGY

With regard to the development and transfer of technology, non-Annex I Parties are encouraged to provide information on country-specific technology needs and

assistance received from developed country Parties and the financial mechanism of the Convention and, as appropriate, on how they have utilized this assistance in support of the development and enhancement of endogenous capacities, technologies and know-how.

4.6. OTHER CAPACITY-BUILDING NEEDS

Non-Annex I Parties are encouraged to provide information on other relevant needs and/or areas for capacity-building other than those mentioned in sections 3.4, 3.5, 3.6 and 4.2 of this annex.

5. SUBMISSION

The information is to be provided as described in decision 17/CP.8, annex, paragraphs 56–58.

The information shall be communicated by each non-Annex I Party to the COP in a single document, with an executive summary outlining the information contained in the full document, in both hard copy and electronic format.

Each non-Annex I Party shall submit its national communication in one of the official languages of the United Nations. The executive summary, which is to be of no more than 10 pages, shall be translated into English and made publicly available. Parties are also encouraged to submit, to the extent possible and where relevant, English translations of their communications.

Additional or supporting information may be supplied through other documents such as a technical annex.

ANNEX II

DOMESTIC MEASUREMENT, REPORTING AND VERIFICATION OF DOMESTICALLY SUPPORTED NATIONALLY APPROPRIATE MITIGATION ACTIONS

1. INTRODUCTION

The framework for domestic measurement, reporting and verification (MRV) for domestically supported nationally appropriate mitigation actions (NAMAs) is guided by the general guidelines adopted by COP 19, through decision 21/CP.19. The application of these guidelines for developing country Parties is voluntary.

Their purpose is to provide general guidance for how developing country Parties may describe the domestic MRV of domestically supported NAMAs. These guidelines could help countries to set up their national MRV frameworks for policies and measures based on existing domestic processes, arrangements, methodologies and expertise, as well as to determine the information best suited for reporting on domestic MRV in the biennial update reports (BURs).

The following sections cover the contents of the guidelines, providing details on the principles, purpose and the reporting of information.

2. PRINCIPLES

These guidelines are general, voluntary, pragmatic, non-prescriptive, non-intrusive and country-driven, take into account national circumstances and national priorities, respect the diversity of NAMAs, build on existing domestic systems and capacities, recognize existing domestic MRV systems and promote a cost-effective approach.

3. PURPOSE

The purpose is to provide general guidelines, for voluntary use by developing country Parties, based on the above-mentioned agreed principles, to describe the domestic MRV of domestically supported NAMAs.

4. RECOGNIZING, USING AND REPORTING ON THE DOMESTIC MRV

Developing country Parties are encouraged to utilize existing domestic processes, arrangements or systems, including domestically available information, methodologies, experts and other aspects, for domestic MRV. Otherwise, developing country Parties may wish to voluntarily establish domestic processes, arrangements or systems for the domestic measurement, reporting and verification of domestically supported NAMAs.

Developing country Parties may, taking into account national circumstances, capacities and national priorities, indicate the general approach adopted:

- a) To establish, when appropriate, and/or recognize, where relevant, inter alia, the institutions, entities, arrangements and systems involved in the domestic MRV of NAMAs;
- b) To measure domestically supported NAMAs, including the collection and management of relevant and available information and the documentation of methodologies;
- c) To verify domestically supported NAMAs, including the use of domestic experts using domestically developed processes, thereby enhancing the cost-effectiveness of the verification process.