

# **KYOTO PROTOCOL** **REFERENCE MANUAL**

ON ACCOUNTING OF  
EMISSIONS AND ASSIGNED AMOUNT



*“Climate change is the defining challenge of our age.”*

BAN KI-MOON, CMP 3, BALI, INDONESIA

## FOREWORD



Climate change is increasingly recognized as one of the most critical challenges ever to face humankind. With the release of the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), the international scientific community has significantly advanced public understanding of climate change and its impacts. In this report, the IPCC concluded that “warming of the climate system is unequivocal, as is now evident from observations of increases in average global air and ocean temperatures, widespread melting of snow and ice and rising average global sea level”. The conclusions of the IPCC report made the case for action against climate change stronger than ever before.

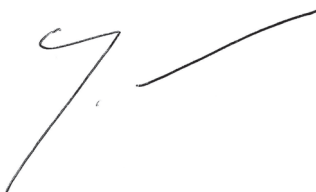
Climate change is a global problem that requires a global response embracing the needs and interests of all countries. The United Nations Framework Convention on Climate Change, which came into effect in 1994, and its Kyoto Protocol that came into effect in 2005 – sharing the objective of the Convention to stabilize atmospheric concentrations of greenhouse gases – enable such a global response to climate change.

The Protocol sets binding targets for developed countries, known as “Annex I Parties”, to limit or reduce greenhouse gas emissions. It has established innovative mechanisms to assist these Parties in meeting their emissions commitments. Both the Convention and its Protocol created a framework for the implementation of an array of national climate policies, and stimulated the creation of the carbon market and new institutional mechanisms that could provide the foundation for future mitigation efforts.

The Kyoto Protocol sets a specific time period – known as the first commitment period – for Annex I Parties to achieve their emission reduction and limitation commitments, commencing in 2008 and ending in 2012. The Protocol has put in place an accounting and compliance system for this period with a set of rules and regulations. In particular, the Protocol lays down specific rules concerning the reporting of information by Annex I Parties that have to demonstrate that they are meeting their commitments, and the review of this information. Rules have also been established for the accounting of assigned amounts and the trading of Kyoto units. The compliance system established by the Protocol is one of the most comprehensive and rigorous systems to be found in international treaties.

All the above elements of the Protocol are explained in detail in this reference manual. It is our goal to help Parties and the other stakeholders to understand and navigate through the rules, systems and procedures that underpin the Kyoto Protocol's accounting and compliance system.

Finally, I would like to extend my thanks to the team from the Reporting, Data and Analysis programme, led by Ms. Katia Simeonova, that coordinated the preparation and release of this reference manual in 2008 – the first year of the first commitment period under the Kyoto Protocol – with support and input from the Sustainable Development Mechanisms and Legal Affairs programmes. In addition, I would like to thank Ms. Clare Breidenich (who previously worked in the RDA programme) for her valuable substantive input for the preparation of this Manual.



**Yvo de Boer**, *Executive Secretary*  
United Nations Framework  
Convention on Climate Change  
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United Nations Framework Convention on Climate Change

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# I. INTRODUCTION

This manual is provided as a reference tool to assist Parties included in Annex I to the United Nations Framework Convention on Climate Change (hereafter referred to as the Convention) (Annex I Parties) in the implementation of their commitments related to the accounting of emissions and assigned amount under the Kyoto Protocol. In this regard, the manual synthesizes the requirements for these Parties with respect to:

- National systems for the preparation of national inventories;
- National registries for tracking holdings of and transactions of Kyoto units;
- Reporting, review and compliance procedures related to the reporting of greenhouse gas (GHG) emission inventories and accounting of assigned amount;
- Accounting for land use, land-use change and forestry (LULUCF) activities;
- Participation in the Kyoto mechanisms and the procedures for establishing, maintaining and suspending eligibility to participate; and
- Transactions of Kyoto units.

This manual does not address methodologies and baselines or procedures for crediting of emission reduction and removal projects under the clean development mechanism or joint implementation. Nor does it provide information on other Kyoto Protocol commitments not directly related to the accounting of Parties' emissions and assigned amount, other than what is covered in this introduction.

To provide a context for the requirements and procedures for accounting of emissions and assigned amount, this manual begins in [CHAPTER II](#) with a brief introduction to the Kyoto Protocol, with particular emphasis on the requirements and systems that are critical to this accounting.

[CHAPTER III](#) describes how emissions are reported and assigned amount is accounted. It highlights the key requirements for Parties in establishing their assigned amount, to report emissions and account for assigned amount during the commitment period (the first commitment period being 2008 – 2012), and to demonstrate compliance at the end of the commitment period.

[CHAPTER IV](#) explains the requirements for participation in the Kyoto Protocol mechanisms, which are known as eligibility requirements, and the procedures by which a Party's eligibility to participate in these mechanisms is established, maintained, suspended and reinstated.

The remainder of the manual provides detailed information on the accounting and reporting requirements:

- [CHAPTER V](#) describes the requirements related to the reporting of GHG emissions, specifically national systems and national inventories;
- [CHAPTERS VI](#) and [VII](#) describe the requirements related to the accounting of assigned amount, specifically national registries and transactions of Kyoto units;
- [CHAPTER VIII](#) describes the rules and procedures for accounting for LULUCF activities.

The rules and requirements explained in this manual are derived from the Kyoto Protocol, and from decisions of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol (CMP). In some cases, technical details relating to implementation have been elaborated through meetings of lead reviewers of expert review teams (ERTs), the Registry System Administrators (RSA) forum and the implementation of the secretariat's data systems.

Throughout the document, references to the underlying provisions of the Kyoto Protocol, relevant decisions of the CMP, and other documents are provided in the margins of the page. Unless otherwise indicated, all Articles referenced are Articles of the Kyoto Protocol.

Unless otherwise indicated, reference to an Annex I Party in this manual means an Annex I Party to the Convention that is also a Party to the Kyoto Protocol with commitments inscribed in Annex B of the Kyoto Protocol.

Full titles of all decisions with source documents are provided in [APPENDIX III](#) to this manual. [APPENDIX V](#) provides a glossary of terms used in this manual and [APPENDIX VI](#) provides a list of the acronyms and abbreviations used.

## II. THE KYOTO PROTOCOL

The Kyoto Protocol to the United Nations Framework Convention on Climate Change was adopted in Kyoto, Japan, in December 1997 and entered into force on 16 February 2005. The rules and requirements for implementation of the Kyoto Protocol were further elaborated in a package of decisions called the Marrakesh Accords. The Marrakesh Accords were formally adopted by the CMP at its first session in Montreal, Canada, in December 2005.

The Kyoto Protocol shares the ultimate objective of the Convention to stabilize atmospheric concentrations of GHGs at a level that will prevent dangerous interference with the climate system. In pursuit of this objective, the Kyoto Protocol builds upon and enhances many of the commitments already in place under the Convention.

Each Annex I Party has a binding commitment to limit or reduce GHG emissions and innovative mechanisms have been established for Parties to facilitate compliance with this commitment. Other commitments include:

- Each Annex I Party must undertake domestic policies and measures to reduce GHG emissions and to enhance removals by sinks;
- In implementing these policies and measures, each Annex I Party must strive to minimize any adverse impact of these policies and measures on other Parties, particularly developing country Parties;
- Annex I Parties must provide additional financial resources to advance the implementation of commitments by developing countries;
- Both Annex I and non-Annex I Parties must cooperate in the areas of:
  - (a) The development, application and diffusion of climate-friendly technologies;
  - (b) Research on and systematic observation of the climate system;
  - (c) Education, training, and public awareness of climate change; and
  - (d) The improvement of methodologies and data for GHG inventories.

Article 2,  
paragraph 1

Article 2,  
paragraph 2

Article 11,  
paragraph 2

Article 10

## 2.1. EMISSION TARGETS AND INITIAL ASSIGNED AMOUNT

The core commitment under the Kyoto Protocol, contained in Article 3, paragraph 1, requires each Annex I Party to ensure that its total emissions from GHG sources listed in Annex A to the Kyoto Protocol over the commitment period do not exceed its allowable level of emissions (Annex A covers GHG emissions from the energy, industrial processes, solvent and other product use, agriculture and waste sectors; [see APPENDIX I](#)). The allowable level of emissions is called the Party's assigned amount.

Each Annex I Party has a specific emissions target inscribed in Annex B to the Kyoto Protocol, which is set relative to its emissions of GHGs in its base year ([see TABLE II-1](#)). The Annex B emissions target and the Party's emissions of GHGs in the base year determine the Party's initial assigned amount<sup>1</sup> for the Kyoto Protocol's five-year first commitment period (2008–2012). The quantity of the initial assigned amount is denominated in individual units, called assigned amount units (AAUs), each of which represents an allowance to emit one metric tonne of carbon dioxide equivalent (t CO<sub>2</sub> eq).

<sup>1</sup> Under the Kyoto Protocol, the term 'assigned amount' is used for both the quantity established by Article 3, paragraphs 7 and 8, and the quantity against which a Party's Annex A emissions are compared for the determination of compliance with Article 3, paragraph 1. This latter quantity includes the assigned amount established under Article 3, paragraphs 7 and 8, and any additions to or subtractions from the assigned amount, pursuant to Article 3, paragraphs 10, 11 and 12. For clarity in this paper, the term 'initial assigned amount' is used to refer only to the quantity established under Article 3, paragraphs 7 and 8. Once the initial assigned amount is recorded in the compilation and accounting database, it is permanent for the commitment period and cannot be changed. The term 'available assigned amount' means the initial assigned amount, plus any additions to or subtractions from the assigned amount through LULUCF activities or the Kyoto mechanisms.

**Table II-1. Quantified emission limitation or reduction targets as contained in Annex B to the Kyoto Protocol**

Annex I Parties <sup>a</sup>	Emission limitation or reduction (expressed in relation to total GHG emissions in the base year or period inscribed in Annex B to the Kyoto Protocol) <sup>b</sup>
Austria, Belgium, Bulgaria, Czech Republic, Denmark, Estonia, European Community, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, United Kingdom of Great Britain and Northern Ireland	-8 %
United States of America <sup>c</sup>	-7 %
Canada, Hungary, Japan, Poland	-6 %
Croatia	-5 %
New Zealand, Russian Federation, Ukraine	0
Norway	+1 %
Australia	+8 %
Iceland	+10 %

<sup>a</sup> At the time of publication of this manual, the amendment to the Kyoto Protocol that contains an emissions target for Belarus (-8%) had not been ratified by a sufficient number of Parties for it to enter into force.

<sup>b</sup> Countries with economies in transition have flexibility in the choice of base year.

<sup>c</sup> Country which has declared its intention not to ratify the Kyoto Protocol.

The initial assigned amount of Annex I Parties recorded in the compilation and accounting database (CAD) can be found in [APPENDIX IV](#).

The Kyoto Protocol allows Annex I Parties to add to and subtract from their initial assigned amount, in effect changing the level of their allowed emissions over the commitment period, through LULUCF activities and through participation in the Kyoto mechanisms. Through these activities, Parties may generate, cancel, acquire or transfer emission allowances, which will raise or lower their assigned amount. These emission allowances are collectively called Kyoto units, and are subject to specific rules, depending on the particular unit type.

In addition, Annex I Parties are required to take measures to protect and enhance emission removals in the LULUCF sector. Emissions and removals from the LULUCF sector are treated differently from the emissions of the Annex A sectors, since this sector is not covered by Annex A to the Kyoto Protocol.

## 2.2. LAND USE, LAND-USE CHANGE AND FORESTRY

[Article 3,](#)  
[annex, paragraphs 3 and 4](#)

Unlike the Convention, which includes all emissions and removals from LULUCF in a Party's total emissions, the Kyoto Protocol restricts the accounting of the LULUCF sector to net emissions and removals from specific activities that are defined under Article 3, paragraphs 3 and 4, of the Kyoto Protocol.

Article 3, paragraph 3, covers direct, human-induced, afforestation, reforestation and deforestation activities. Accounting of these is mandatory: each Annex I Party must report on and account for emissions and removals in the commitment period on lands on which these activities have occurred.

[Decision 13/CMP.1,](#)  
[annex, paragraphs 25 and 32](#)

Article 3, paragraph 4, activities are restricted to forest land management, cropland management, grazing land management and/or revegetation. Accounting of these activities is optional, which means that each Party must choose whether to account for emissions and removals from each activity during the commitment period. Once an Annex I Party elects a LULUCF activity, it must continue to account for it over the full commitment period. Each Party is subject to a 'forest management cap' that applies to both additions to and subtractions from its assigned amount (see [CHAPTER VIII.3.3](#)). In contrast to emissions from Annex A sources, the Kyoto Protocol requires Parties to account for emissions and removals from LULUCF activities by adding to or subtracting from their initial assigned amount. Net removals from LULUCF activities result in

the issuance of additional emission allowances called removal units, or RMUs, which a Party may add to its assigned amount; Parties must account for any net emissions from LULUCF activities by cancelling Kyoto units. Calculation of the quantity of emission allowances to be issued or cancelled is subject to specific rules, which differ for each LULUCF activity (see CHAPTERS VII.1, VIII.2 and VIII.3).

### 2.3. THE KYOTO MECHANISMS

Article 3,  
paragraphs 10, 11 and 12

The Kyoto Protocol allows Annex I Parties to add to or subtract from their initial assigned amount, thus raising or lowering the level of their allowed emissions over the commitment period, by trading Kyoto units with other Parties. These additions and subtractions are carried out in accordance with the so-called Kyoto mechanisms:

- Emissions trading under Article 17;
- Joint implementation (JI) under Article 6;
- Clean development mechanism (CDM) under Article 12.

These Kyoto mechanisms enhance the flexibility of Annex I Parties to meet their emission reduction or limitation commitments, by allowing these Parties to take advantage of lower-cost emission reductions outside their territories. This manual does not consider activities under the mechanisms but instead focuses on changes in the level of assigned amount for Annex I Parties arising from their use.

Decision 2/CMP.1,  
paragraph 5

Annex I Parties must meet specific methodological and reporting requirements, or criteria, under Article 5, paragraphs 1 and 2, and Article 7, paragraphs 1 and 4, in order to become and remain eligible to participate in each of these mechanisms (see CHAPTER IV). These eligibility criteria help to ensure that a Party is reporting and accounting accurately for its emissions and assigned amount, in order that the impact of using the Kyoto mechanisms on the Party's compliance with its Article 3, paragraph 1, commitment can be accurately tracked. A Party's eligibility to participate in each of the Kyoto mechanisms is determined as a normal outcome of the reporting, review and compliance procedures under the Kyoto Protocol.

Decision 2/CMP.1,  
paragraph 1

Kyoto units acquired by a Party under the Kyoto mechanisms are added to its assigned amount, whereas units transferred to another Party are subtracted from the transferring Party's assigned amount. Each Party's use of the Kyoto mechanisms must be supplementary to domestic action;<sup>2</sup> that is, a Party should not meet its Article 3, paragraph 1, commitment solely by acquiring Kyoto units. Domestic action must make up a significant proportion of a Party's effort to meet its commitment.

### 2.3.1. EMISSIONS TRADING

Article 17  
Decision 11/CMP.1,  
annex, paragraph 6

Under this mechanism, an Annex I Party may transfer Kyoto units to or acquire units from another Annex I Party. Emissions trading does not affect the total assigned amount of Annex I Parties collectively; rather, it re-distributes the assigned amount among them.

A Party may acquire an unlimited number of units under Article 17. However, the number of units that a Party may transfer to other Parties is limited by the Party's commitment period reserve (CPR). The CPR is the minimum level of units that a Party must hold in its national registry at all times. The requirement for each Party to maintain a CPR prevents a Party from over-transferring units, and thus impair its ability to meet its Article 3, paragraph 1, commitment (see CHAPTER VI.2 for more information on the CPR and the way in which it is calculated).

Annex I Parties may choose to implement domestic or regional (e.g. with a group of Parties) schemes for entity-level emissions trading, under their authority and responsibility.<sup>3</sup> Although the Kyoto Protocol does not address domestic or regional emissions trading, Kyoto Protocol emissions trading forms an umbrella under which national and regional trading schemes operate; entity-level trading uses Kyoto units and needs to be reflected in the Kyoto Protocol accounting. Any transfer of units between entities in different Parties under such domestic or regional trading systems is also subject to Kyoto Protocol rules. The European Union emissions trading scheme (EU ETS) is one example of a regional trading system operating under the Kyoto Protocol umbrella.



## 2.3.2. JOINT IMPLEMENTATION

Article 6

Decision 9/CMP.1,  
and annex

Joint implementation (JI) is a project-based mechanism by which one Annex I Party can invest in a project that reduces emissions or enhances sequestration in another Annex I Party, and receive credit for the emission reductions or removals achieved through that project. The unit associated with JI is called an emission reduction unit (ERU). ERUs are converted from existing AAUs and RMUs before being transferred. JI does not affect the total assigned amount of Annex I Parties collectively; rather it redistributes the assigned amount among them.

Decision 9/CMP.1,  
annex, paragraphs 20 and 23

There are two approaches for verification of emission reductions under JI, commonly called ‘Track 1’ and ‘JI Track 2’. Under Track 1, a host Party that meets all of the eligibility requirements may verify its own JI projects and issue ERUs for the resulting emission reductions or removals.

Decision 13/CMP.1,  
annex, paragraph 46

Decision 9/CMP.1,  
annex, paragraphs 24, 30–45

Annex I Parties may also choose to use the JI Track 2<sup>4</sup> verification approach. The eligibility requirements for JI Track 2 are less strict than those for Track 1 (see CHAPTER IV). Under JI Track 2, each JI project is subject to verification procedures established under the supervision of the Joint Implementation Supervisory Committee (JISC). JI Track 2 procedures require that each project be reviewed by an accredited independent entity to determine whether the project meets the requirements established under Article 6. The emission reductions or removals resulting from the project must also be verified by an accredited independent entity in order for the Party concerned to issue ERUs.

All Annex I Parties participating in JI, irrespective of whether they use Track 1 or 2, are required to inform the secretariat of their national guidelines and procedures for approving, monitoring and verifying these projects. They are also required to make information about each project publicly available.

Detailed information on the requirements and procedures for verification under JI Track 2 is available at <http://ji.unfccc.int/>.

<sup>2</sup> Quantitative guidance regarding appropriate levels of supplementary action has not been provided by Parties.

<sup>3</sup> An entity can be a company, plant or broker authorized by a Party to hold or trade in emissions.

<sup>4</sup> The verification procedure under the JISC, defined in paragraphs 30–45 of the annex to decision 9/CMP.1.

## 2.3.3. THE CLEAN DEVELOPMENT MECHANISM

Decision 3/CMP.1,  
annex

The CDM is also a project-based mechanism. CDM credits may be generated from emission reduction projects or from afforestation and reforestation projects in non-Annex I Parties.

Decision 3/CMP.1,  
annex

Decision 5/CMP.1,  
annex

Decision 6/CMP.1,  
annex

Unlike emissions trading and JI, projects under the CDM create new Kyoto units and their acquisition by Annex I Parties increases both the total assigned amount available for those Annex I Parties collectively and their allowable level of emissions. As a result, CDM projects must meet detailed requirements and follow exact procedures and steps for the validation and registration of projects and the verification and certification of emission reductions and removals. These steps, largely carried out by designated operational entities (DOEs), ensure that reductions or removals associated with projects are additional to what would otherwise occur in the absence of the projects. Additional rules apply to afforestation and reforestation projects.

CDM projects result in three types of Kyoto units. Certified emission reductions (CERs) are issued for projects that reduce emissions, while temporary CERs (tCERs) and long-term CERs (lCERs) may be issued for projects that enhance removals through afforestation and reforestation projects.

Article 12,  
paragraph 4

The CDM Executive Board supervises the CDM, under the authority and guidance of the CMP. The Executive Board is responsible for registering projects, approving methodologies for determining project baselines and monitoring emission reductions, and for issuing CERs. It is also responsible for the accreditation of DOEs.

A detailed explanation of the procedures and methodological requirements of the CDM is beyond the scope of this manual. More information is available at <http://cdm.unfccc.int/>.

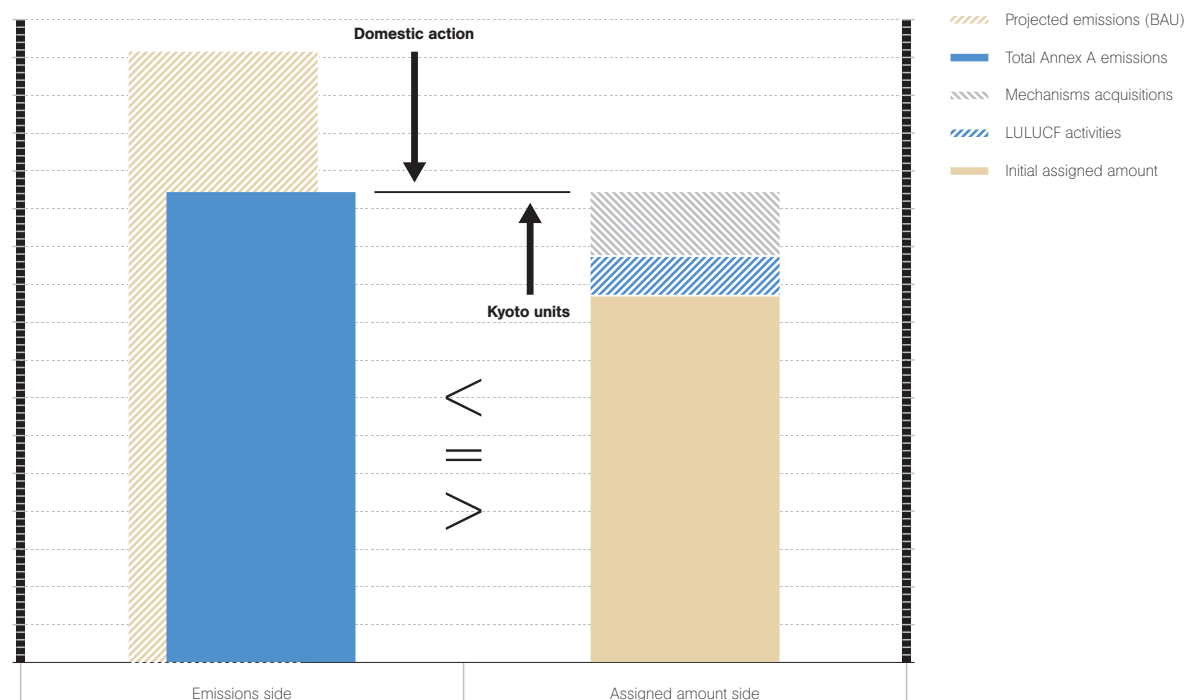
## 2.4. THE KYOTO PROTOCOL ACCOUNTING AND COMPLIANCE SYSTEM

Decision 13/CMP.1,  
annex, paragraphs 11, 12 and 14

At the end of the commitment period, the determination of each Annex I Party's compliance with its emission commitment will be made by comparing its total Annex A emissions to its available assigned amount. Each Party's available assigned amount is equal to its initial assigned amount, plus any additional Kyoto units that the Party has acquired from other Parties through the Kyoto mechanisms or issued for net removals from a LULUCF activity, minus any units that the Party has transferred to other Parties or cancelled for net emissions from a LULUCF activity.

So long as the Party's total emissions over the commitment period are less than or equal to its total assigned amount, the Party will be in compliance with its emissions limitation and reduction commitment. **FIGURE II-1** shows the relationship between domestic action, LULUCF activities and the Kyoto mechanisms in meeting the Article 3, paragraph 1, commitment.

Figure II-1. Determination of compliance with Article 3, paragraph 1



## 2.4.1. THE KYOTO PROTOCOL ACCOUNTING SYSTEM

Article 7,  
paragraph 4

Determination of each Party's compliance with its Article 3, paragraph 1, commitment depends on the accurate accounting of each Party's emissions and assigned amount prior to, during and at the end of the commitment period. In order to ensure accurate accounting, the Marrakesh Accords elaborate requirements for the estimation of emissions and the tracking of assigned amount by Parties at the national level. It also incorporates and strengthens the Convention's reporting requirements and review procedures. Together, these components, and the underlying data systems that support them, comprise the Kyoto Protocol accounting system. Finally, the Kyoto Protocol establishes a Compliance Committee to consider and determine cases of non-compliance.

The Kyoto Protocol accounting system is centred on two parallel information streams – GHG inventories and assigned amount information, (see [FIGURE II-2](#)).

Article 5,  
paragraph 1

Decision 13/CMP.1,  
annex, paragraph 17

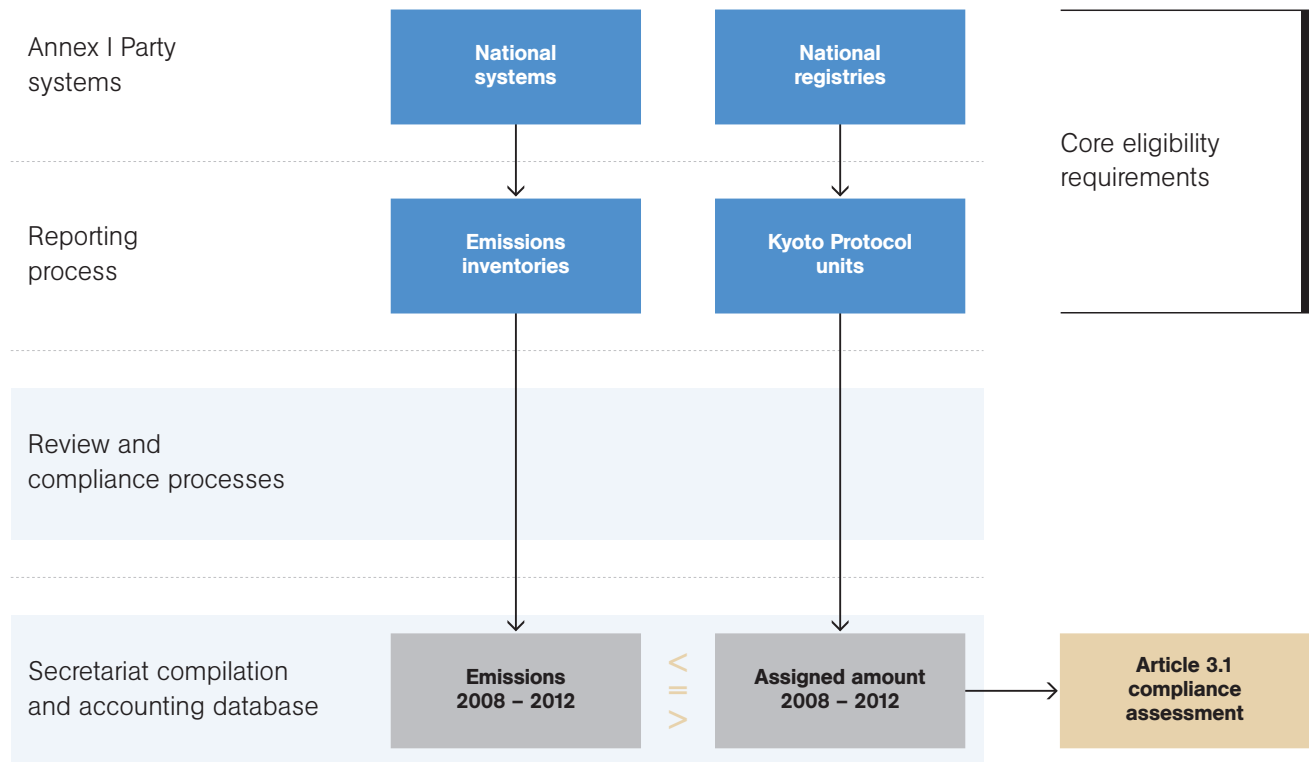
Article 7,  
paragraphs 1 and 2

Article 8  
Article 18

Decision 13/CMP.1,  
annex, paragraph 50

- Accounting of emissions and assigned amount starts at the national level. Each Annex I Party is required to establish and maintain a national system for the preparation of its national GHG inventory. On the assigned amount side, each Annex I Party is required to establish a national registry for tracking its holdings of and transactions of Kyoto units;
- GHG inventory data and assigned amount information are compiled in national reports and are subject to review and compliance procedures. These procedures verify the Party's level of emissions and assigned amount, and its eligibility to participate in the Kyoto mechanisms;
- Each Party's emissions and assigned amount information are recorded as official only after the information has been reviewed and any questions of implementation have been resolved through the compliance procedures. The secretariat's CAD is the official repository of information related to each Party's accounting of emissions and assigned amount.

Figure II-2. Overview of the Kyoto Protocol accounting and compliance



## 2.4.1.1. NATIONAL SYSTEMS

Article 5,  
paragraph 1

Decision 19/CMP.1

Each Annex I Party is required to establish and maintain a national system for the estimation of anthropogenic emissions by sources and removals by sinks. A national system comprises the institutional, legal and procedural requirements necessary for planning, preparing and maintaining a GHG inventory over time. A national system must meet the relevant requirements and must be in place at least one year prior to the start of the first commitment period, that is, by 31 December 2006.

Implementation of a national system is a criterion for eligibility to participate in the Kyoto mechanisms.

2.4.1.2. NATIONAL AND CLEAN DEVELOPMENT MECHANISM REGISTRIES AND  
THE INTERNATIONAL TRANSACTION LOGDecision 24/CP.8  
and annexDecision 16/CP.10,  
paragraph 2)

Decision 12/CMP.1

Similarly, each Annex I Party is also required to establish and implement an electronic database, called a national registry, to track its holdings of and transactions of Kyoto units. Each registry must conform to detailed technical standards that cover data format, data exchange and communication between registries, data security, serial numbers of Kyoto units and transaction rules, including termination of invalid transactions. The national registry must be in place prior to the submission of the Party's initial report under the Kyoto Protocol (which is due on 1 January 2007), and is a criterion for eligibility to participate in the Kyoto mechanisms.

The CDM registry, administered by the secretariat under the guidance of the CDM Executive Board, is responsible for issuing CERs upon instruction by the Executive Board and distributing them to the accounts of project participants in Annex I Party national registries. The CDM registry must conform to the same technical standards as national registries.

Decision 13/CMP.1,  
annex, paragraphs 38, 41, 42 and 43

The international transaction log (ITL), which is administered by the secretariat, verifies the validity of transactions of Kyoto units by national registries and the CDM registry. Whenever a registry undertakes a transaction that affects the Party's holdings of Kyoto units available for meeting its Article 3, paragraph 1, commitment, it communicates with the ITL. The ITL checks each transaction to ensure that it conforms to the general rules for accounting of assigned amount, as well as specific rules for the particular mechanism and transaction in question. The transaction will be approved only if it passes all these checks. The ITL also receives information from the CDM information system regarding CDM projects and the JI information system regarding ERUs verified under JI Track 2 procedures.

## 2.4.1.3. REPORTING

The Kyoto Protocol maintains and extends the two regular, ongoing reporting requirements for Annex I Parties established under the Convention – an annual report and a periodic national communication (see [FIGURE II-3](#)). For each reporting requirement, Parties are expected to submit the information elements as required by the Convention and to include supplementary information related to the implementation of the Kyoto Protocol. In this way, submission of the annual report and the national communication under the Kyoto Protocol also fulfils the Party's reporting obligation under the Convention.

Figure II-3. The Kyoto Protocol reports

Initial report	Annual reports	National communications
<p>GHG inventory time-series</p> <p>Calculation of assigned amount under Article 3, paragraphs 7 and 8</p> <p>Calculation of commitment period reserve</p> <p>National registry</p> <p>National system</p> <p>LULUCF definitions under Article 3, paragraphs 3 and 4, and elections under Article 3, paragraph 4</p> <p>Kyoto Protocol base year for fluorinated gases</p> <p>Article 4 agreement</p>	<p>GHG Inventory</p> <p>LULUCF information</p> <p>Assigned amount information</p> <p>Article 3, paragraph 14 information</p> <p>Changes in national system</p> <p>Changes in national registry</p>	<p>Convention elements</p> <p>National system</p> <p>National registry</p> <p>Supplementarity of the use of the Kyoto mechanisms to domestic action</p> <p>Article 2 policies and measures</p> <p>Legislative and enforcement</p> <p>Administrative arrangements</p> <p>Technology transfer, capacity building and other Article 10 activities</p> <p>Financial resources</p>
	<p><b>True-up period report</b></p> <p>Final assigned amount information for commitment period</p> <p>Retired units</p> <p>Units for carry-over</p>	

## ANNUAL REPORTS

Article 7,  
paragraph 1

Decision 15/CMP.1,  
annex, section I

For the annual report, each Annex I Party is required to submit an annual national GHG emission inventory by 15 April of each year, as required by the Convention, plus supplementary information on its implementation of the Kyoto Protocol. This supplementary information covers:

- The Party's holdings of and transactions of Kyoto units for the previous calendar year, reported in the standard electronic format for reporting Kyoto units (SEF);
- Emissions and removals from LULUCF activities under Article 3, paragraphs 3 and 4, and calculations of the amount to be added to and subtracted from the assigned amount;
- Changes in the Party's national system;
- Changes in the Party's national registry; and
- Information on the Party's implementation of policies and measures that minimize adverse social, environmental and economic impacts on developing country Parties.

The specific information to be included in a given annual report depends on the Party's participation in the Kyoto mechanisms, its accounting frequency for LULUCF activities, and the year of the commitment period (see CHAPTER II.2). Annual reporting of the GHG inventory, and of information on holdings of and transactions of Kyoto units, is a requirement for participation in the Kyoto mechanisms.

#### NATIONAL COMMUNICATIONS

Article 7,  
paragraph 2

Decision 15/CMP.1,  
annex, section II

Each Party must also provide the following supplementary information on its implementation of the Kyoto Protocol in its periodic national communications:

- A description of the national system;
- A description of the national registry;
- An explanation of how the Party's use of the Kyoto mechanisms is supplementary to domestic action;
- Information on the Party's implementation of policies and measures under Article 2;
- A description of the Party's legislative, enforcement and administrative arrangements;
- A description of technology transfer, capacity-building and other Article 10 activities; and
- Information on the provision of financial resources to developing country Parties for the implementation of Article 10 activities.

The parts of the national communication that are directly relevant to the accounting of the Party's assigned amount and its eligibility to participate in the Kyoto mechanisms are the sections on the national system and the national registry.

#### INITIAL REPORT

Decision 13/CMP.1,  
annex, paragraphs 6, 7 and 8

In addition to the annual report and national communication, the Kyoto Protocol establishes two special reports to facilitate the accounting of emissions and assigned amount: the initial report and the true-up period report. The initial report is required to facilitate the calculation of the Party's initial assigned amount and to demonstrate its capacity to account for its emissions and assigned amount. Initial reports must be submitted by Parties by 31 December 2006 or one year after the entry into force of the Kyoto Protocol for the Party, whichever is later, and must contain the following information:



- A complete GHG inventory time series from the base year to the latest year available;
- The identification of the selected base year for hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF<sub>6</sub>);
- The agreement under Article 4, if applicable;
- The Party's calculation of its assigned amount;
- The Party's calculation of its CPR;
- The identification of the parameters related to the accounting of LULUCF activities (minimum value for tree crown cover, land area and tree height);
- The identification of activities elected under Article 3, paragraph 4;
- The identification of the accounting period for each Article 3, paragraph 3, activity and each Article 3, paragraph 4, activity, if applicable;
- A description of the Party's national system; and
- A description of the Party's national registry.

## TRUE-UP PERIOD REPORT

Decision 13/CMP.1,  
annex, paragraph 49

Decision 15/CMP.1,  
annex, paragraph 20

Upon expiration of the 'additional period for fulfilling commitments', an Annex I Party is required to submit a report, in the SEF, that contains information on the:

- Holdings of and transactions of Kyoto units for the calendar year up to the end of the abovementioned period;
- Quantity and serial numbers of Kyoto units retired for compliance purposes; and
- Total quantity of Kyoto units that the Party wants to carry over to the next commitment period.

Decision 13/CMP.1,  
paragraph 3

Decision 13/CMP.1,  
annex, paragraph 49

Decision 27/CMP.1,  
section XIII

This report, commonly known as the 'true-up report', contains information required to enable the determination of the Party's compliance with its Article 3, paragraph 1, commitment. The true-up report must be submitted upon expiration of the 'additional period for fulfilling commitments', and the CMP may clarify the due date for this report.

## 2.4.1.4. REVIEW PROCEDURES

Decision 22/CMP.1,  
annex, paragraphs 3, 7, 8 and 49

The Kyoto Protocol also incorporates and enhances the review procedures under the Convention, and establishes a Compliance Committee to resolve any potential problems identified during the review process.

Article 8,  
paragraphs 1–3

Each report submitted by a Party under the Kyoto Protocol is subject to review by an ERT. The ERT conducts a thorough and technical assessment of the Party's implementation of its Kyoto Protocol commitment and prepares a review report.

Decision 22/CMP.1

If the ERT identifies a problem with a Party's implementation of a particular commitment that is not resolved by the Party during the review, the ERT has the authority to list the problem as a 'question of implementation' in its final review report. An ERT can raise questions of implementation only when there are unresolved problems regarding the implementation by a Party of the mandatory requirements of the UNFCCC review guidelines.<sup>5</sup> All review reports, including those that do not list any questions of implementation, will be forwarded to the Compliance Committee for consideration.

ERTs have specific responsibilities with respect to the accounting of emissions and assigned amount, as described below.

## INVENTORY REVIEW AND ADJUSTMENTS

Decision 22/CMP.1,  
annex, part II

Decision 20/CMP.1,  
paragraph 3 and annex,  
paragraph 4

During the initial and annual reviews, ERTs will examine each Party's GHG inventory to assess whether the emissions and removals have been reported correctly and estimated using appropriate methodologies. If an ERT is of the opinion that a Party's inventory is incomplete, or has been prepared in a manner which is not consistent with the Intergovernmental Panel on Climate Change (IPCC) methodologies and guidelines, including the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories* (hereinafter referred to as the Revised 1996 IPCC Guidelines), the *IPCC Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories* (hereinafter referred to as the IPCC good practice guidance) and the *IPCC Good Practice Guidance for Land Use, Land-Use Change and Forestry* (hereinafter referred to as the IPCC good practice guidance for LULUCF), it may recommend the application of an 'adjustment'. However, a Party will always be given the opportunity to correct a problem before the ERT recommends an adjustment.

Decision 20/CMP.1,  
paragraph 5 and 8,  
and annex, paragraphs 10–13

An adjustment is essentially a change to the inventory estimate reported by the Party. Adjustments may be applied to a Party's emissions for the calculation of its assigned amount, to a Party's Annex A emissions during the commitment period, or to a Party's emissions and removals for an activity under Article 3, paragraphs 3 and 4. If an adjustment is applied, the CAD will store the original total GHG emission estimate and the adjusted emission estimate (i.e. the emission estimate reported by the Party plus the adjustment). The adjusted emission estimate will be used for the accounting of assigned amount and the determination of compliance. An adjustment will always result in a conservative estimate. In other words, any adjustment calculated for emissions in the base year will always result in lower total emissions, so that the Party's initial assigned amount is not inflated. Conversely, adjustments to emissions in a year of the commitment period will always result in a higher figure for total emissions, so as not to underestimate emissions during the commitment period.

Adjustments to a Party's inventory can affect a Party's eligibility to participate in the Kyoto mechanisms (see CHAPTER IV.2) or its ability to issue RMUs for LULUCF activities (see CHAPTER VII.1.3).

#### REVIEW OF ASSIGNED AMOUNT INFORMATION AND CORRECTIONS

Decision 22/CMP.1,  
paragraph 5,  
and annex, part III,  
paragraph 93(a)

During the annual review and the review at the end of the commitment period, ERTs will assess the Party's reported information on holdings of and transactions of Kyoto units and compare this information with that maintained by the ITL. ERTs will also review any information on problems identified by the ITL. If an ERT identifies a problem with a particular transaction, it may recommend a 'correction'. A correction is analogous to an inventory adjustment; however, whereas adjustments are applied to inventory estimates, corrections are applied to a Party's holdings of Kyoto units.

Decision 22/CMP.1,  
annex, paragraph 93(b)

Decision 27/CMP.1,  
annex, section V  
paragraph 5(b)

For corrections, as for adjustments, a Party will have the opportunity to resolve a problem for which a correction has been identified, in accordance with time frames established in the review procedures. If the Party is unable to correct the problem within this time, the ERT may recommend the application of a correction in its review report. The Compliance Committee will determine whether to apply the correction, and any corrections applied will be recorded in the CAD.

<sup>5</sup> "Guidelines for the technical review of greenhouse gas inventories from Parties included in Annex I to the Convention".

## 2.4.2. THE COMPLIANCE COMMITTEE

## Article 18

The Compliance Committee was established to facilitate, promote and enforce compliance with the commitments under the Kyoto Protocol. It considers ‘questions of implementation’ concerning a Party’s compliance with the Kyoto Protocol requirements. Only a Party or an ERT can bring a question of implementation to the attention of the Compliance Committee. An ERT may identify a question of implementation in a review report for a particular Party, or a Party may submit a question of implementation with respect to itself or another Party. Neither the secretariat nor the Compliance Committee may raise a question of implementation.

Decision 27/CMP.1,  
Annex, section IX,  
paragraph 12

The Compliance Committee has two branches: the facilitative branch and the enforcement branch. The Compliance Committee allocates a question of implementation to the appropriate branch, based on their mandates. At any time during its consideration of a question of implementation, the enforcement branch may refer the question to the facilitative branch.

## 2.4.2.1. THE FACILITATIVE BRANCH

Decision 27/CMP.1,  
annex, section IV

The mandate of the facilitative branch is to provide advice and facilitation to Parties in implementing requirements under the Kyoto Protocol and to promote compliance by Parties with respect to their commitments. It is responsible for addressing questions of implementation relating to measures taken by Annex I Parties to mitigate climate change, in a way that minimizes their adverse impacts on developing countries, and the use of the Kyoto mechanisms by Annex I Parties to supplement domestic action. Furthermore, the facilitative branch may provide early warning of potential non-compliance with emission targets, methodological and reporting commitments relating to GHG inventories, and commitments to provide the supplementary information required in a Party’s annual inventory (see CHAPTER III).

## 2.4.2.2. THE ENFORCEMENT BRANCH

Decision 27/CMP.1,  
annex, section V

The enforcement branch is responsible for questions of implementation regarding a Party's implementation of its methodological and reporting requirements where its accounting of emissions and assigned amount is concerned, and for determining and applying consequences for non-compliance with the Article 3, paragraph 1, commitment. The enforcement branch also has the authority to suspend and reinstate a Party's eligibility to participate in the Kyoto mechanisms.

The enforcement branch has three important roles with respect to the accounting of emissions and assigned amount:

Decision 27/CMP.1,  
annex, section V,  
paragraph 5

(a) It can apply adjustments to a Party's inventory and corrections to its holdings of Kyoto units in the event that the Party does not agree with the adjustment or correction applied by the ERT. The adjusted inventory estimates or corrected assigned amount holdings will be recorded in the CAD and become the official data for compliance purposes;

Decision 27/CMP.1,  
annex, section XV,  
paragraph 4

(b) It can suspend and reinstate a Party's eligibility to participate in the Kyoto mechanisms. The branch will suspend eligibility whenever it determines that a Party is in non-compliance with a commitment related to eligibility; it can reinstate the Party's eligibility once the Party has demonstrated that it is no longer in non-compliance with the particular commitment that led to the loss of its eligibility;

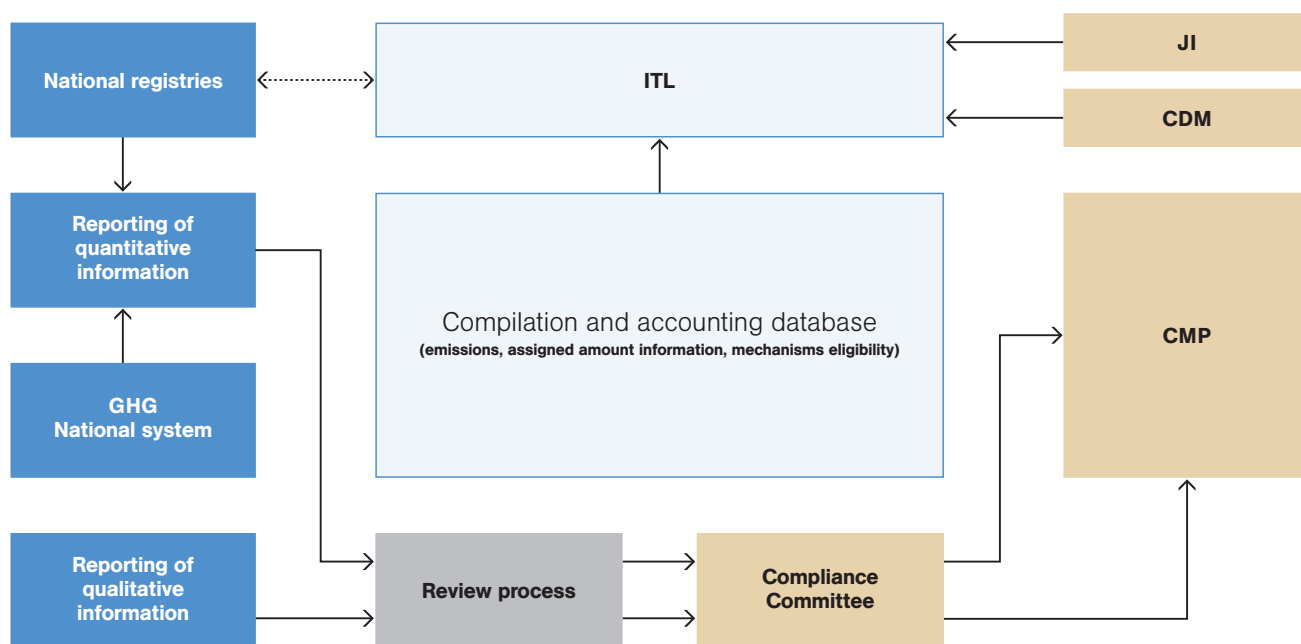
Decision 27/CMP.1,  
annex, section XV,  
paragraph 5

(c) It has the authority to determine non-compliance with a Party's emissions commitment at the end of the commitment period. If the branch determines that the Party's emissions have exceeded its available assigned amount, it will apply the following consequences:

- i. Deduct tonnes from the assigned amount of the subsequent commitment period, equal to 1.3 times the amount of excess emissions;
- ii. Require the Party to develop a compliance action plan;
- iii. Suspend the Party's eligibility to transfer units.

FIGURE II-4 shows the Kyoto Protocol reporting, review and compliance system relating to the accounting of emissions and assigned amount, and the relationships of the individual components to each other.

Figure II-4. The Kyoto Protocol accounting and compliance system



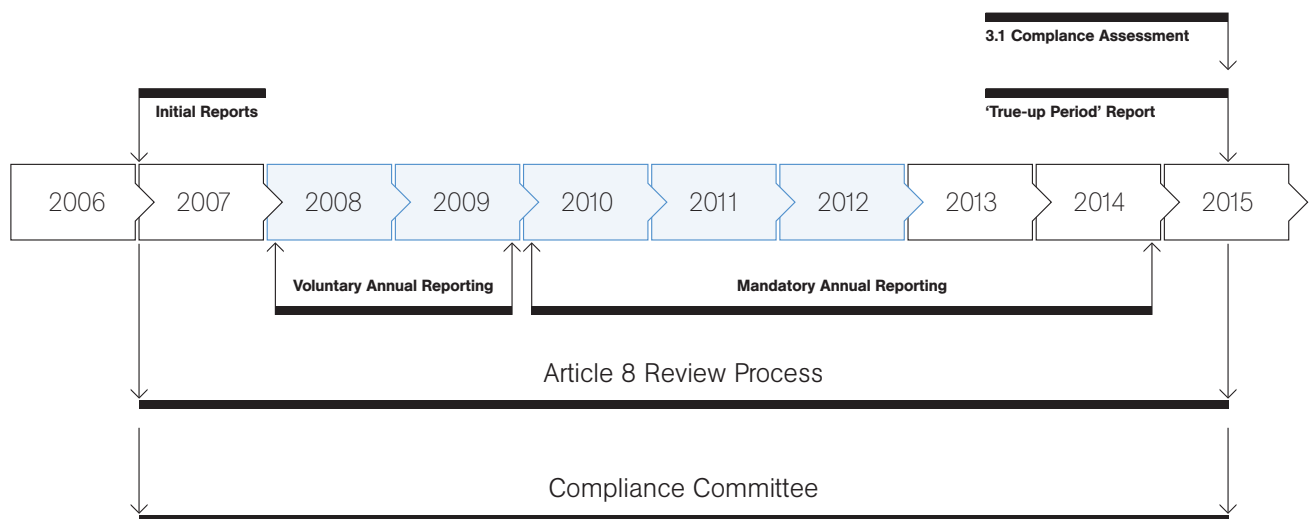
### III. ACCOUNTING OF EMISSIONS AND ASSIGNED AMOUNT OVER THE COMMITMENT PERIOD

The accounting of assigned amount can be separated into three distinct phases:

- The initial phase, during which a Party elects parameters for its reporting of emissions, establishes its initial assigned amount and becomes eligible to participate in the Kyoto mechanisms;
- The annual phase, during which the Party estimates its emissions and adds to or subtracts from its assigned amount towards meeting its Article 3, paragraph 1, commitment;
- The end of the commitment period phase, at which point the Party's compliance with its Article 3, paragraph 1, commitment is determined and assessed ([see CHAPTER III.3](#)).

Each of these phases requires the submission of a specific type of report, and corresponding review and compliance procedures. This chapter provides an overview of these phases. More detailed information is provided in [CHAPTERS V](#) through [VIII](#). The timeline for these phases is shown in [FIGURE III-5](#) below.

**Figure III-5. The Kyoto Protocol accounting and compliance timeline**



Decision 13/CMP.1,  
paragraph 2,  
and annex, paragraphs 5–10

### 3.1. THE PROCESS FOR ESTABLISHING THE INITIAL ASSIGNED AMOUNT

Article 3, paragraphs 7 and 8, of the Kyoto Protocol establish the initial assigned amount for each Party in terms of a percentage of their base year emissions. The exact quantity of each Party's initial assigned amount in t CO<sub>2</sub> eq must be established prior to the commitment period or within one year of the entry into force of the Kyoto Protocol for the Party, whichever comes later.

The process for establishing a Party's assigned amount is initiated by the Party's submission of its initial report, which should provide information on the Party's calculation of its assigned amount, its CPR, and other information necessary for the Party's accounting of assigned amount during the commitment period.

After the initial report has been reviewed, and any questions of implementation have been resolved by the Compliance Committee, the Party's initial assigned amount, together with other information related to the accounting of emissions and assigned amount, will be recorded in the secretariat's CAD. Once the initial assigned amount is recorded, it is permanent for the commitment period and cannot be changed.

#### 3.1.1. INITIAL REPORTS

Decision 13/CMP.1,  
paragraph 2,  
and annex, paragraphs 6–8

Each Party is required to submit its initial report before 1 January 2007 or one year after the entry into force of the Kyoto Protocol for that Party, whichever comes later.

The initial report must contain the information listed below or, if the information has already been submitted, a reference to where it can be found:

- (a) A national GHG inventory, containing a complete set of common reporting format (CRF) tables for the Party's base year up to the most recent year, and a national inventory report (NIR) (see CHAPTER V.2);
- (b) The Party's selection of its base year for the fluorinated gases (F gases) – HFCs, PFCs and SF<sub>6</sub> (see CHAPTER VI.1.1.2);
- (c) Any agreement between Annex I Parties reached under Article 4 (see CHAPTER VI.1.1.3);<sup>6</sup>
- (d) The Party's calculation of its assigned amount (see CHAPTER VI.1);



- (e) The Party's calculation of its CPR (see CHAPTER VI.2);
- (f) The identification of the Party's forest parameter values for use in the accounting of its activities under Article 3, paragraphs 3 and 4 (see CHAPTER VIII.4.1);
- (g) The identification of the activities that the Party elects under Article 3, paragraph 4 (see CHAPTER VIII.4.1);
- (h) The identification of the frequency of accounting for each activity under Article 3, paragraph 3, and each elected activity under Article 3, paragraph 4 (see CHAPTER VIII.4.1);
- (i) A description of the Party's national system (see CHAPTER V.1); and
- (j) A description of the Party's national registry (see CHAPTER VI.3).

#### 3.1.2. RECORDING OF INITIAL ACCOUNTING PARAMETERS

Decision 13/CMP.1,  
annex, paragraphs 9 10, 52 and 53

The information contained in the initial report is subject to a thorough technical review by an ERT. Any problems identified during the review will be resolved by the Compliance Committee. After the review and compliance procedures have been completed, the Party's initial assigned amount and the status of its eligibility to participate in the Kyoto mechanisms will be recorded in the secretariat's CAD. The CAD also maintains other information necessary for the accounting of the Party's assigned amount, such as the election of activities under Article 3, paragraph 4, and the accounting period for each activity under Article 3, paragraph 3, and for each activity elected under Article 3, paragraph 4.

Once the value of a Party's initial assigned amount and the status of its eligibility to participate in the Kyoto mechanisms have been recorded in the CAD, the information will be provided to the ITL. At this time, the Party can begin to issue AAUs in its national registry. If the Party meets the eligibility requirements, it can also begin to transfer and acquire units through the Kyoto mechanisms. The initial accounting phase is now complete and the annual accounting phase begins.

<sup>6</sup> The Article 4 agreement between the European Community and its 15 member States, at the time of their ratification of the Kyoto Protocol, is the only example of such an agreement being submitted to the secretariat.

## 3.2. ANNUAL ACCOUNTING

The annual accounting phase tracks each Party's emissions and assigned amount during the commitment period. During the commitment period, each Party will accumulate Annex A emissions, and will account for LULUCF activities under Article 3, paragraph 3 and activities elected under Article 3, paragraph 4. Eligible Parties may also transfer or acquire units through the Kyoto mechanisms. Accurate accounting of emissions and the addition to and subtraction from the assigned amount are facilitated by the submission by Parties of annual reports, and corresponding review and compliance procedures.

### 3.2.1. ANNUAL REPORTS

Article 7,  
paragraph 1

Decision 15/CMP.1,  
paragraph 2  
and annex part I

The first annual report under the Kyoto Protocol is due on 15 April 2010, 2010 being the year of submission of national inventories for the first year of the commitment period. At this time, submission of the annual report containing the national GHG inventory, and the supplementary information required by Article 7 of the Kyoto Protocol becomes mandatory. However, because the provision of certain information under Article 7 is required to maintain eligibility to participate in the Kyoto mechanisms, the Kyoto Protocol recognizes that Parties may voluntarily submit annual reports in advance of the formal 2010 submission date. This chapter summarizes the information required in reports submitted voluntarily to 2010 in order to maintain eligibility to participate in the Kyoto mechanisms, as well as the requirements as of the 2010 submission year and beyond.

Decision 14/CMP.1,  
annex, paragraph 1

- For the years commencing with the first submission year after the establishment of the Party's initial assigned amount through the year in which the Party *first* transfers or acquires units through the Kyoto mechanisms, a complete GHG inventory is the only requirement for the annual report. Information on any significant changes to a Party's national system, or to its national registry, must also be included in the annual report whenever such changes occur;
- Once a Party has transferred or acquired units under the Kyoto mechanisms, it must include information on its holdings of and transactions of Kyoto units in the annual report for the following calendar year. This information must be reported in the SEF (see CHAPTER V.4.2). Most Parties are expected to begin reporting information on Kyoto units in 2009.

- As of 2010, each Party must include information on its emissions and removals for each activity under Article 3, paragraph 3, and for any elected activities under Article 3, paragraph 4. If a Party has chosen annual accounting of any of these activities (see CHAPTER VI), it must also include its calculation of the ‘accounting quantity’ for that activity annually, beginning in 2010. Conversely, if a Party has elected commitment period accounting for an activity, then the Party must include the calculation of the accounting quantity for this activity in its annual report for the last year of the commitment period, which will be submitted in 2014 (see CHAPTER VII).
- As of 2010, each Party must also include information on implementation of their commitments under Article 3, paragraph 14, of the Kyoto Protocol

More detailed information on these reporting requirements is provided in CHAPTER V.2.2)

TABLE III-2 below shows the information required in the annual reports over time. The information required in the final report for the commitment period – the true-up period report – is discussed in CHAPTER III.3.1.

Table III-2. Information requirements for annual reports

Reporting Element	2008 <sup>a</sup>	2009 <sup>a</sup>	2010	2011	2012	2013	2014	2015 (True-up report)
Convention inventory	●	●	●	●	●	●	●	
KP LULUCF inventory			●	●	●	●	●	
Holdings and transactions of KP units reported in the SEF <sup>b</sup>	○	○	●	●	●	●	●	●
Calculation of AQ for annually accounted LULUCF activities			●	●	●	●	●	
Calculation of AQ for CP accounted LULUCF activities							●	
Article 3, paragraph 14 information			●	●	●	●	●	
Retired KP units								●
KP units for carry-over								●

<sup>a</sup> Voluntary reporting required for Kyoto mechanisms eligibility.

<sup>b</sup> See CHAPTER II.4.1.3 for information on the SEF submission associated with the true-up period report.

● Element required.

○ Element required year following first transfer or acquisition of units.

Abbreviations: KP = Kyoto Protocol; KP LULUCF Inventory = emissions and removals from activities under Article 3, paragraph 3, and activities elected under Article 3, paragraph 4; AQ = accounting quantity; CP = commitment period; SEF = standard electronic format for reporting Kyoto units (see CHAPTER VI.4.2).

Decision 13/CMP.1,  
annex, paragraph 53 – 58

### 3.2.2. RECORDING OF ANNUAL ACCOUNTING PARAMETERS

Following the review of each annual report, and any related compliance procedures, the Party's Annex A emissions, its emissions and removals and accounting quantities for LULUCF activities, its holdings of Kyoto units, and any change in the status of the Party's eligibility to participate in the Kyoto mechanism, will be recorded in the CAD. Any change in the status of the Party's eligibility to participate in the mechanisms, and the accounting quantity for each LULUCF activity, when relevant, will subsequently be provided to the ITL by the CAD. The ITL will notify the Party, via its national registry, of any action required of the Party in response to the updated data, such as the cancellation of units for emissions from a LULUCF activity. (See CHAPTERS VII.3.1 and VIII.2.1).

Decision 13/CMP.1,  
annex, paragraph 59 and 60

Decision 27/CMP.1,  
section XIII

The annual report containing the inventory for the last year of the first commitment period (2012) will be submitted in 2014. After completion of the review and compliance procedures for that year, each Party's total Annex A emissions for the commitment period will be recorded in the CAD, as will the Party's final accounting quantities for LULUCF activities.

### 3.3. END OF COMMITMENT PERIOD ACCOUNTING

Following the submission and review of the final annual report, the end of commitment period accounting phase will begin. This phase provides the final tally of the Party's assigned amount for the commitment period and enables the determination of whether the Party is in compliance with its Article 3, paragraph 1, commitment.

Decision 27/CMP.1,  
annex, section XIII

The Kyoto Protocol provides for a specific period of 100 days that is to occur after the completion of the review of the final annual report for the commitment period in order for Parties to continue making transactions for the purpose of 'truing up' any remaining differences between Parties' total emissions during the commitment period and units retired for compliance. The formal name for this period is the 'additional period for fulfilling commitments', but it is commonly known as the 'true-up period'.

Decision 27/CMP.1,  
annex, section XIII

During the true-up period, each Party is allowed to continue to undertake transactions of Kyoto units. Transaction that may need to be undertaken include the transfer of units to and the acquisition of units from other Parties under Articles 6, 12 and 17, the issuance of RMUs and cancellation of units for activities under Article 3, paragraphs 3 and 4, the replacement of tCERs and lCERs, and the retirement of units. It is possible that the CDM Executive Board may continue to issue CERs during the true-up period

that relate to emission reductions made during the first commitment period; however, it is also possible that guidance from the CMP will determine an earlier point from which CERs for emission reductions in the first commitment period are no longer to be issued.

In addition, if the Compliance Committee has decided to apply any corrections to a Party's holdings of assigned amount and the Party has not yet taken action to reflect the correction, then the Party should take such action during the true-up period. If the Party fails to take corrective action, then the correction will be included in the final determination of compliance following the true-up period.

Decision 13/CMP.1,  
annex, paragraphs 13 and 14

Before the end of the true-up period, each Party will be required to demonstrate that it meets its Article 3, paragraph 1, commitment. To do so, each Party must 'retire' a quantity of Kyoto units equal to or greater than its total Annex A emissions for the commitment period. The Party retires units by transferring them to a designated account in its national registry (see CHAPTER VII.5).

#### 3.3.1. THE TRUE-UP PERIOD REPORT

Decision 13/CMP.1,  
paragraph 3

Decision 13/CMP.1,  
annex, paragraph 49

Each Party must submit a final report at the end of the true-up period in order to enable determination of its compliance with its Article 3, paragraph 1, commitment. The true-up period report must be submitted upon expiration of the 'additional period for fulfilling commitments'; the CMP may clarify the due date for this report.

Decision 15/CMP.1,  
annex, paragraph 20

Decision 13/CMP.1,  
annex, paragraph 49 (a)

The true-up period report must contain all the information that is normally reported annually on assigned amount, including the transaction information in the SEF for the period from the beginning of the current calendar year until the end of the true-up period.

Decision 13/CMP.1,  
annex, paragraph 49 (b) and (c)

In addition, the report must include a complete list, by serial number, of the units that the Party has retired, including retirements already reported in previous annual reports. If the Party has AAUs, ERUs or CERs remaining in its registry after it has retired sufficient units to cover its Annex A emissions, it may request that these units be carried over to the subsequent commitment period, subject to applicable carry-over rules. The Party should include a list of these units, by serial number, in its true-up period report.

Decision 13/CMP.1,  
annex, paragraph 14

### 3.3.1.1. COMPARISON OF EMISSIONS AND ASSIGNED AMOUNT

Whether a Party is in compliance with its Article 3, paragraph 1, commitment will be determined after the review of the true-up period report. The determination will be based on a comparison of the quantity of units retired by the Party with the Party's total Annex A emissions for the commitment period.<sup>7</sup> The ERT responsible for the review of a Party's true-up period report will first verify that the Party has taken the necessary actions in its registry related to the cancellation and replacement of units, and with respect to any corrections applied by the enforcement branch of the Compliance Committee.

If a Party has not cancelled sufficient units to replace tCERs or lCERs, or has not undertaken transactions necessary to reflect a correction in the CAD, then the ERT will deduct the corresponding quantity of units from the Party's reported quantity of retired units.

Decision 22/CMP.1,  
annex, paragraph 91

The ERT will then compare the resulting quantity of units in the Party's retirement account to the Party's total Annex A emissions for the commitment period. The review report of the ERT for the true-up period will include a clear assessment of whether the Party's total Annex A emissions for the commitment period are less than or equal to the quantity of units retired by the Party (including any deduction for outstanding corrections or replacements).

### 3.3.2. DETERMINATION OF NON-COMPLIANCE

Decision 27/CMP.1,  
annex, part XV,  
paragraphs 5 and 6

DES, section 6.2.2

If the enforcement branch determines that a Party is in non-compliance with its Article 3, paragraph 1, commitment, the Compliance Committee will apply specific consequences. First, the branch will deduct a quantity of assigned amount from the Party in the subsequent commitment period equal to the amount by which the Party's Annex A emissions have exceeded its available assigned amount, multiplied by 1.3. The deduction of assigned amount will be recorded in the CAD and provided to the ITL. The ITL will notify the Party of its obligation to cancel units equivalent to the deduction.

The enforcement branch will also request the Party to prepare and submit a compliance action plan. This plan must assess the reason for the Party's non-compliance, and indicate actions, including a timetable, to show how the Party intends to meet its emission commitment in the subsequent commitment period.

Decision 27/CMP.1,  
section X, paragraphs 3 and 4

In addition, the enforcement branch will suspend the Party's eligibility in the second commitment period to transfer units to other Parties through emissions trading. The branch will reinstate this eligibility after considering the submitted compliance action plan, unless it determines that the Party has not demonstrated that it will meet its emissions limitation or reduction commitment in the second commitment period. Alternatively, the branch will reinstate this eligibility immediately if the Party demonstrates that it has already met its commitment in the subsequent commitment period.

### 3.3.3. CARRY-OVER OF UNITS

Decision 22/CMP.1,  
annex, paragraph 90

The ERT will also review the quantity of units that the Party has indicated that it wishes to carry over to ensure that the Party has no outstanding correction, and that the units requested meet the rules for carry-over. For instance, units derived from LULUCF activities may not be carried over.

Following the review and compliance procedures, the total quantity of units available for carry-over will be recorded in the CAD and provided to the ITL. Once the ITL has information on the total quantity of units available to a Party for carry-over, the Party may initiate carry-over of the units (see CHAPTER VII.6). Any units carried over will be validated by the Party's registry and the ITL for the subsequent commitment period. The Party should report on the units carried over in its next SEF submitted for the subsequent commitment period.

If the Party is required to retire additional units, or has an outstanding correction, this information will also be provided to the ITL. The ITL will not approve the carry-over of any units until the Party has undertaken all necessary retirement of units, as well as any action necessary to reflect a correction applied by the Compliance Committee.

The accounting for the commitment period is now complete. For more in-depth information about specific issues discussed in this chapter, refer to CHAPTERS V through VII.

<sup>7</sup> During the negotiations of the Kyoto Protocol, Parties recognized that in some circumstances, emissions from a single industrial process project that was put into operation after 1990 could significantly impact a Party's ability to meet its Article 3, paragraph 1, commitment. To address this problem, Decision 14/CP.7 allows Parties that meet specific criteria to exclude these emissions from their Annex A total emissions for the purpose of determining their compliance. In order to use this exclusion, both the Party and the project concerned must meet specific conditions:

- (a) The Party's total CO<sub>2</sub> emissions in 1990 must be less than 0.05% of the total CO<sub>2</sub> emissions from Annex I Parties in that year;
- (b) The project must be an industrial process facility at a single site that has entered into operation after 1990, or the expansion after 1990 of an industrial process facility at a single site that was in operation in 1990;
- (c) The project must use renewable energy, and apply best environmental practice and best available technology in order to minimize emissions.

If these conditions are met, the Party may exclude that portion of the project's CO<sub>2</sub> emissions that would cause the Party to exceed its assigned amount from its total Annex A emissions. Other emissions from the project, to the extent that they do not cause the Party's total emissions to exceed its assigned amount, will be included in the compliance assessment for the Party.

## IV. ELIGIBILITY TO PARTICIPATE IN THE KYOTO MECHANISM

### 4.1. THE ELIGIBILITY CRITERIA

Decision 2/CMP.1,  
paragraph 5

The Kyoto Protocol requires that a Party must meet six specific criteria in order to be eligible to participate in the Kyoto mechanisms. These criteria are based on the methodological and reporting requirements under Article 5, paragraphs 1 and 2, and Article 7, paragraphs 1 and 4. These eligibility criteria help to ensure that a Party is accounting accurately for its emissions and assigned amount, so that use of the Kyoto mechanisms will not jeopardize the Party's compliance with its Article 3, paragraph 1, commitment.

Decision 27/CMP.1,  
annex, section V, paragraph 4

A Party's eligibility to participate in the Kyoto mechanisms will be determined as a normal outcome of the review and compliance procedures following submission of the initial report, and thereafter through the annual review and compliance procedures. Only the enforcement branch may suspend or reinstate a Party's eligibility to participate in the Kyoto mechanisms.

Decision 3/CMP.1,  
annex, paragraph 31

There are six specific criteria for eligibility to participate in the Kyoto mechanisms:

Decision 9/CMP.1,  
annex, paragraph 21,

Decision 11/CMP.1,  
annex, paragraph 2

- (a) The Party is a Party to the Kyoto Protocol;
- (b) The Party's initial assigned amount has been established and recorded in the CAD;
- (c) The Party's national system is in compliance with the requirements established under Article 5, paragraph 1;
- (d) The Party's national registry is in compliance with the requirements established under Article 7, paragraph 4;
- (e) The Party has submitted its inventory for the most recent year, and this inventory meets the requirements established under Article 7, paragraph 1 (it should be noted that additional conditions apply for this eligibility criterion; [see CHAPTER IV.2](#)); and
- (f) The Party has submitted information on its assigned amount under Article 7, paragraph 1 (e.g. the SEF and related information), and has correctly accounted for additions to and subtractions from its assigned amount.



Decision 9/CMP.1,  
annex, paragraph 26

The same eligibility criteria apply to all three Kyoto mechanisms. In addition, the application of the requirements of Article 6, paragraph 4, for JI is linked to the same criteria (a) – (f). Failure to meet criteria (a), (b) or (d) above will prevent participation in any of the Kyoto mechanisms. However, the effect of failing to meet the eligibility criteria related to (c), (e) and (f) is different for each mechanism:

Decision 9/CMP.1,  
annex, paragraphs 21, 23 and 24

- (a) For emissions trading, failure to meet any of these criteria will prevent a Party from transferring or acquiring units;
- (b) For JI, failure to meet any of these criteria will prevent a host Party from using Track 1, but the Party may use JI Track 2 (i.e. verification of project-related emission reductions must occur through JISC procedures). However, a Party must have a national registry in place in order to issue and transfer ERUs under JI Track 2;
- (c) For CDM, failure to meet any of these criteria will prevent a Party from retiring CERs to be used for compliance with Article 3, paragraph 1, requirements. It should be noted, however, that the Party will still be able to acquire CERs from the CDM registry.<sup>8</sup>

Other activities relating to the Kyoto mechanisms and their relevant units, which were not explicitly mentioned in the Marrakesh Accords, are not affected by a Party's failure to meet the eligibility requirements. For example, Parties may issue AAUs and may develop CDM and JI projects.

All the eligibility criteria, with the exception of that related to the annual submission of assigned amount data (criterion (f)), apply immediately after submission of the initial report. However, because Parties submit information on transactions of Kyoto units in the year after the transactions occurred, eligibility criterion (f) will not apply until the submission year after the Party first transferred or acquired Kyoto units.

<sup>8</sup> Acquisition of CERs from the CDM registry is considered a forwarding of units under the CDM rules rather than a transfer under the emissions trading rules.

#### 4.2. FAILURE TO MEET ELIGIBILITY CRITERIA RELATING TO THE GREENHOUSE GAS INVENTORY

Decision 15/CMP.1,  
paragraph 3

The conditions under which a Party will fail to meet the eligibility criterion related to the annual inventory (criterion (e) above) are explicitly defined. A Party will fail to meet the inventory eligibility criterion if one or more of the following has occurred:

- (a) The Party has not submitted an annual inventory, containing both the CRF tables and the NIR, within six weeks of the due date (15 April of the relevant year);
- (b) The Party has omitted a key source category that accounts for 7 per cent or more of its annual Annex A emissions in the most recently reviewed year;
- (c) The total adjustments applied to Annex A emissions in any given year of the commitment period amount to more than 7 per cent of total reported Annex A emissions;
- (d) At any point during the commitment period, the sum of the total adjustments to Annex A emissions for all years, measured as a percentage of reported Annex A emissions for those years, exceeds 20 per cent; or
- (e) An adjustment is applied in three consecutive years to an Annex A key source category that accounts for 2 per cent or more of the Party's Annex A emissions.

The first two of the inventory failure conditions above (failure to submit within six weeks of the due date, and omission of a large key source category) will apply to the first annual submission made on a voluntary basis after the submission of the initial report. Thus each Party's inventory for the years 2008–2009 must be complete and submitted in time for the six-week deadline in order for the Party to maintain full eligibility to participate in the Kyoto mechanisms.

Decision 20/CMP.1,  
paragraph 9

Conversely, the inventory failure conditions that relate to the application of adjustments apply only to inventories submitted for a year of the commitment period (i.e. those submitted in the years 2010–2014). Thus a Party would not lose its eligibility to participate in the Kyoto mechanisms because of adjustments to Annex A sources until after the review and application of compliance procedures for the annual inventory submission in 2010 (which will cover emissions for the first year of the first commitment period).

Decision 3/CMP.1,  
annex, paragraph 31

Decision 9/CMP.1,  
annex, paragraph 21

Decision 11/CMP.1,  
annex, paragraph 2

Decision 15/CMP.1,  
paragraph 3 (a)

Finally, it should be noted that the inventory failure conditions above apply to Annex A emissions only, except in terms of completeness. The eligibility criterion related to the annual inventory requires only that the inventory cover emissions and removals from the LULUCF sector. The requirement explicitly excludes the LULUCF sector from the inventory quality tests described here. Instead, problems with the quality of the inventory of emissions and removals for LULUCF activities under Article 3, paragraphs 3 and 4, are covered by a separate condition which governs a Party's ability to issue RMUs for a particular activity (see CHAPTER VIII.5).

#### 4.3. ESTABLISHMENT OF ELIGIBILITY TO PARTICIPATE IN THE KYOTO MECHANISMS

Decision 3/CMP.1,  
annex, paragraph 32 (a)

Decision 9/CMP.1,  
annex, paragraph 22 (a)

Decision 11/CMP.1,  
annex, paragraph 3 (a)

Each Party will be considered eligible to participate in the Kyoto mechanisms 16 months after the date of submission of its initial report, unless the enforcement branch has previously taken a decision to suspend the Party's eligibility. The Party will be deemed eligible at a date earlier than 16 months if the enforcement branch notifies the secretariat that it is not considering any question of implementation related to the eligibility criteria for individual mechanisms.

The date of 16 months after submission of the initial report is intended to allow sufficient time for review of the initial report (12 months) and, if necessary, 'expedited procedures' of the enforcement branch to resolve any questions of implementation related to eligibility (four months). Thus the establishment of each Party's eligibility to participate in the Kyoto mechanisms will be a normal outcome of the review and compliance procedures following submission of the Party's initial report.

An ERT will review the information contained in the initial report, including the information related to the Party's implementation of the individual eligibility criteria. If the ERT identifies no problems with any of these criteria (i.e. no question of implementation) then, after the submission of the report by the Compliance Committee, the secretariat will record in the CAD that the Party meets each individual eligibility criterion. This information will be provided to the ITL to enable the Party to begin making transfers and acquisitions of units through the Kyoto mechanisms after the expiration of the 16-month period.

Decision 27/CMP.1,  
annex, section X, paragraph 1

Conversely, if an ERT does raise a question of implementation related to an eligibility criterion, the enforcement branch must consider the question under expedited procedures and take a final decision within four months of receiving the question. Once the branch has taken a decision (either a decision not to proceed with a question of implementation, in which case the Party meets the eligibility criterion, or a decision that the Party does or does not satisfy the particular eligibility criterion), it will notify the secretariat of the decision. The secretariat will record the results of the branch's decision in the CAD and inform the ITL accordingly.

In the unlikely event of the review process and any resulting enforcement branch procedures not being completed within 16 months after the submission of a Party's initial report, the secretariat will record in the CAD that the Party meets each of the eligibility criteria and send this information to the ITL. If the enforcement branch later decides, upon completion of its procedures, that a Party fails to meet a particular eligibility criterion and suspends the Party's eligibility to participate in the relevant mechanisms, the secretariat will update this information in the CAD and for the ITL.

#### 4.4. MAINTENANCE OF ELIGIBILITY TO PARTICIPATE IN THE KYOTO MECHANISMS

Decision 3/CMP.1,  
annex, paragraph 32(b)

Decision 9/CMP.1,  
annex, paragraph 22(b)

Decision 11/CMP.1,  
annex, paragraph 3(b)

Once a Party has established its eligibility to participate in the Kyoto mechanisms, it will remain eligible until and unless the enforcement branch determines that it is in non-compliance with a particular eligibility criterion. Such a determination of non-compliance could occur when a question of implementation regarding the Party's implementation of a requirement related to eligibility has been raised by an ERT, by the Party itself or by another Party.

Decision 22/CMP.1,  
paragraph 8

Questions of implementation raised by ERTs will be forwarded to the Compliance Committee at the end of a review cycle as part of the final review report. However, for the annual review cycle, questions of implementation regarding an inventory may also be raised at the initial check stage, and will be forwarded to the Compliance Committee in a status report.

If an ERT has not identified a question of implementation regarding any eligibility criterion in a review report, then the Compliance Committee will not proceed on any question of implementation relating to eligibility on the basis of that report. However, if the ERT has raised such a question, then the Compliance Committee must consider the particular eligibility criterion and may suspend the Party's eligibility based on its determination.

Decision 27/CMP.1,  
annex, section V,  
paragraph 4 and section XV

#### 4.5. SUSPENSION OF ELIGIBILITY

The Kyoto Protocol rules presume that each Party meets the eligibility criteria for participation in the Kyoto mechanisms. A Party's eligibility to participate in the Kyoto mechanisms may be suspended only by the enforcement branch of the Compliance Committee. The decision of the enforcement branch to suspend a Party's eligibility is contingent upon a determination that the Party concerned fails to meet one or more of the individual eligibility criteria.

Decision 27/CMP.1,  
annex, section X, paragraph 2

#### 4.6. REINSTATEMENT OF ELIGIBILITY

If a Party's eligibility to participate in the Kyoto mechanisms has been suspended, it may request reinstatement directly from the enforcement branch or through the ERT review process. In either case, the enforcement branch will reinstate the Party's eligibility, provided that it determines that there is no longer a question of implementation regarding that eligibility criterion.

There are two options available to a Party through the review process. If it is able to correct the problem that led to the suspension of eligibility in time for the next annual review cycle, then the Party can request reinstatement of eligibility upon completion of the review report for that cycle. This option would be appropriate, for instance, if the Party is able to submit an annual report, containing updated information demonstrating that the problem has been corrected, within six weeks of the due date for submission. In this case, the Party should alert the secretariat and the review team that it has corrected the problem that led to the loss of eligibility and should request reinstatement of its eligibility. The secretariat will bring the review report to the attention of the enforcement branch to ensure that the branch considers the Party's request.

Decision 22/CMP.1,  
annex, part VIII

A Party may also request reinstatement of eligibility through an 'expedited review'. An expedited review is a short review that focuses only on the matter that led to suspension of the Party's eligibility. In order to initiate an expedited review, a Party must officially notify the secretariat that it requests an expedited review. The Party must then submit new information on the matter that led to suspension of eligibility. The new information must be provided to the secretariat at least six weeks after the date of the request for an expedited review. The ERT will provide a draft review report within three weeks of receipt of the new information. The final expedited review report must be completed within 11 weeks.

Decision 27/CMP.1,  
annex, section X, paragraph 2

If the ERT review report (either annual or expedited) indicates that the problem with the eligibility criterion of the mechanism concerned has been resolved, the enforcement branch must reinstate the Party's eligibility, unless it determines that there is still a question of implementation relating to that criterion. In this case, the branch will consider the question of implementation under expedited procedures.

## V. GREENHOUSE GAS INVENTORY-RELATED REQUIREMENTS

This chapter discusses the accounting requirements related to GHG emissions, in particular the national system and the GHG inventory.

### 5.1. THE NATIONAL SYSTEM

#### 5.1.1. REQUIREMENTS

Article 5,  
paragraph 1

Decision 19/CMP.1

Article 5, paragraph 1, of the Kyoto Protocol requires that each Annex I Party establish and maintain a national system for the estimation of GHG emissions and removals. A national system refers to the institutional, legal and procedural arrangements necessary for the planning, preparation, reporting and archiving of inventory information. The national system must be in place by 1 January 2007.

Decision 19/CMP.1,  
annex

The requirements for national systems are essentially functional, in that the guidelines define what a national system must do, rather than how it should do it. Although there is some flexibility in how each Party implements its national system, certain requirements apply. Each Party must:

- (a) Designate a single national entity with overall responsibility for the national inventory;
- (b) Define and allocate specific inventory responsibilities, such as data collection and processing, and select data and methods;
- (c) Develop and implement an inventory quality assurance/quality control (QA/QC) plan and procedures;
- (d) Use the IPCC methodologies and IPCC good practice guidance to prepare the inventory; and
- (e) Archive all inventory information for each year.

Implementation of a national system that meets the requirements of Article 5, paragraph 1, is a criterion for eligibility to participate in the Kyoto mechanisms ([see CHAPTER IV](#)).

#### 5.1.2. REPORTING

Decision 13/CMP.1,  
annex, paragraph 8 (e)

Decision 15/CMP.1,  
annex, paragraph 30

Each Party is required to include a full description of its national system in its initial report, and in each national communication, indicating how the national system meets the requirements under Article 5, paragraph 1, of the Kyoto Protocol. This description must include:

- (a) The name of and contact information for the national entity and its designated representative with overall responsibility for the national inventory of the Party;
- (b) The roles and responsibilities of various agencies and entities in relation to the inventory development process, as well as the institutional, legal and procedural arrangements in place for preparing the inventory;
- (c) A description of the process for collecting activity data, for selecting emission factors and methods, and for the development of emission estimates;
- (d) A description of the process and the results of key category identification;
- (e) A description of the process for the recalculation of previously submitted inventory data;
- (f) A description of the QA/QC plan, its implementation and the quality objectives established, and information on internal and external evaluation and review processes and their results in accordance with the guidelines for national systems; and
- (g) A description of the procedures for the official consideration and approval of the inventory.

In describing its national system, a Party may refer to relevant portions of its NIR.

Decision 15/CMP.1,  
annex, paragraph 21

If a Party makes significant changes to its national system, it should include information on these changes in its annual report. This information may be highlighted in the Party's NIR because the national system is closely related to the Party's efforts to implement the IPCC good practice guidance.



### 5.1.3. REVIEW AND COMPLIANCE PROCEDURES

Decision 22/CMP.1,  
annex, paragraph 12 and 96

Each Party's national system will be subject to a thorough in-country review during the initial review and during the periodic review of national communications. The purpose of this review is to assess the conformity of the national system to the requirements under Article 5, paragraph 1, of the Kyoto Protocol, and its capacity to produce national GHG inventories in line with the requirements under the Kyoto Protocol.

Decision 22/CMP.1,  
annex, paragraphs 100 – 106

The review will be conducted by an ERT, which will examine the activities undertaken by the Party to implement the general and specific functions of the national system, in particular with respect to inventory planning, preparation and management. Much of the ERT assessment will be based on its evaluation of the national inventory and its conformity with the IPCC good practice guidance.

Decision 22/CMP.1,  
annex, paragraphs 15 (b) (iii)  
and 99

In addition, any reported changes to a Party's national system will be assessed during the annual review. If the ERT identifies potential problems in the Party's inventory and believes that these problems may be related to significant changes in the national system, the ERT may request an in-country review of the national system and inventory. The in-country review could occur with the next scheduled in-country review of the annual inventory or national communication, whichever is earlier.

Decision 27/CMP.1,  
annex, section V,  
paragraph 4 (b),  
and section IV,  
paragraph 6 (b)

If the ERT identifies any potential problems with the national system, the Party will be given the opportunity to provide additional information, in accordance with the applicable review deadline. Any questions of implementation regarding a Party's national system will be considered by the enforcement branch of the Compliance Committee. The facilitative branch is also responsible for providing advice and facilitation relating to the national system prior to the first commitment period.

### 5.2. THE NATIONAL INVENTORY

Article 7,  
paragraph 1

The Kyoto Protocol requirements for national GHG inventories incorporate and build upon the requirements under the Convention. Each Party to the Kyoto Protocol must submit an annual GHG inventory that meets the methodological and reporting requirements established under the Convention. Submission of this inventory covers the obligation of that Party under both the Kyoto Protocol and the Convention. There are differences for some Parties between the inventory under the Convention and the Kyoto Protocol. The main difference is with respect to the territorial (geographical) coverage

established in the instruments of ratification under the Convention and the Kyoto Protocol, which differs for a number of Parties (e.g. France, Denmark, etc.).

Decision 15/CMP.1,  
annex, paragraph 2

The submission of an annual inventory that meets the requirements under Article 7, paragraph 1, of the Kyoto Protocol is a criterion for eligibility to participate in the Kyoto mechanisms (see CHAPTER IV).

#### 5.2.1. REQUIREMENTS

Article 5,  
paragraph 2 and 3

Decision 18/CP.8

Decision 14/CP.11

Document FCCC/SBSTA/2006/9

Decision 6/CMP.3,  
paragraph 2

Both the Convention and its Kyoto Protocol require Parties to estimate emissions by sources and removals by sinks of six direct GHGs that are not controlled by the Montreal Protocol: CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), HFCs, PFCs and SF<sub>6</sub>. These emissions and removals must be classified according to the six sectors identified by the IPCC: energy, industrial processes, solvents and other product use, agriculture, LULUCF and waste. In addition, each Party must estimate emissions and removals from activities under Article 3, paragraph 3, and activities elected under Article 3, paragraph 4.

Under the Kyoto Protocol, the energy, industrial processes, solvents and other product use, agriculture and waste sectors are considered Annex A sources (for a full list of Annex A sources, see appendix I).

#### ANNEX A SOURCES

Article 5,  
paragraphs 2 and 3

Decision 2/CP.3

All Annex A inventory estimates must be prepared using methods that are consistent with the Revised 1996 IPCC Guidelines and the IPCC good practice guidance, which provide detailed guidance on sectors and specific sources. A Party may use national methods to prepare its GHG inventory provided that these methods are consistent with the IPCC good practice guidance and result in more reliable estimates.

Decision 18/CP.8

Decision 14/CP.11

Document FCCC/SBSTA/2006/9,  
paragraph 1, 2, 45, 48 – 49

Each inventory submission must be submitted in the most recent reporting format adopted by the COP under the Convention, including the set of standardized data tables called the CRF. Each inventory must contain a full set of CRF tables for all GHG sectors (including LULUCF) for all years from and including the Party's base year up to the most recent year. Thus, in the year 2010, the inventory submissions of most Parties must contain base year – 2008 inclusive. In addition, each inventory submission must include a NIR describing the methodologies and the data sources used to compile the inventory, as well as the institutional structures and QA/QC procedures.

## LAND USE, LAND-USE CHANGE AND FORESTRY SOURCES AND SINKS

Decision 14/CP.11  
Decision 17/CMP.1,  
paragraph 1  
Decision 6/CMP.3,  
paragraph 1 and annex,  
and SBSTA 28 conclusions

Additional inventory requirements apply to the LULUCF sector. Each Party is required to prepare a full LULUCF inventory as required by the Convention, using methods consistent with the IPCC good practice guidance for LULUCF. The LULUCF inventory must be submitted in the CRF tables, and corresponding methodological information must be included in the Party's NIR.

In addition, each Party must submit additional information specific to the activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol (see CHAPTER VIII for more information).

### 5.2.2. REPORTING

Different inventory reporting requirements apply before and during the commitment period.

#### INITIAL REPORT

Decision 13/CMP.1,  
annex, paragraph 7 (a)

Each Party must submit a complete national inventory, or reference to a recent complete national inventory, in its initial report. This inventory must include data for all years from the Party's base year up to and including the most recent year available, and cover all the sectors under the Convention (i.e. Annex A sources and LULUCF). The Party must also include information on parameters related to its definition of forest (see CHAPTER VII). Emissions and removals from lands subject to activities under Article 3, paragraphs 3 and 4, are not required in the initial report.

#### ANNUAL REPORT

Decision 15/CMP.1,  
paragraph 2

Submission of the annual inventory is mandatory under the Kyoto Protocol beginning in 2010. However, because submission of the most recent annual inventory is a criterion for eligibility to participate in the Kyoto mechanisms, a Party may voluntarily submit an annual inventory in the years 2008 and 2009, in order to maintain full eligibility. The annual inventory is due by 15 April of each year.

Decision 15/CMP.1,  
annex, paragraphs 5–9

From 2010 onwards, each Party must include in its annual inventory additional information on emissions and removals from Article 3, paragraphs 3 and 4, activities. Each Party must include annual information for each year of the commitment period on emissions and removals for each Article 3, paragraph 3, activity, and for each activity elected under Article 3, paragraph 4, regardless of whether the Party has chosen annual or commitment period accounting for that activity. If a Party has elected to account for cropland management, grazing land management or revegetation, it must also provide the relevant parts of the CRF tables for the base year for each elected activity.

#### 5.2.3. REVIEW AND COMPLIANCE PROCEDURES

Decision 22/CMP.1,  
annex, paragraphs 12 (a),  
14, 50, 51 and 55

Each inventory submitted under the Kyoto Protocol will be subject to a thorough technical review by an ERT to assess whether the inventory has been prepared in conformity with the IPCC good practice guidance and reporting requirements. The review will cover both the CRF tables and the NIR. It will take place in-country during the initial review. Annual inventory reviews will normally occur as desk or centralized reviews; however, each Party will be subject to at least one in-country review of its inventory during the commitment period.

Decision 22/CMP.1,  
annex, paragraph 52

The inventory review has two stages – the initial check stage and the individual review stage. During the initial check stage, the inventory will be assessed for timeliness and completeness, and a draft status report prepared and sent to the Party for comment. Any comments or additional information received from the Party within six weeks of the deadline for submission will be considered in the final status report. Upon finalization, the status report will be forwarded to the Compliance Committee for its consideration.

During the individual review stage, the ERT will examine the emission and removal estimates and the methodologies used in order to determine whether the IPCC good practice guidance and IPCC good practice guidance for LULUCF have been applied. It will prepare a draft review report, which will be provided to the Party concerned for comment. The Party will have a specific time period in which to respond to the draft report and/or provide additional information prior to finalization of the report. Once the report has been finalized, it will be forwarded to the Compliance Committee. Any questions of implementation relating to national inventories will be considered by the enforcement branch.

#### 5.2.3.1. ADJUSTMENTS

Article 5,  
paragraph 2

Decision 20/CMP.1,  
and annex,

Decision 27/CMP.1,  
annex, section V, paragraph 5

The ERT may also recommend an adjustment to an inventory estimate during the individual review stage. An adjustment shall be applied only when the inventory data submitted by Parties are incomplete or have been prepared in a manner which is not consistent with the IPCC good practice guidance or the IPCC good practice guidance for LULUCF. An adjustment may be recommended by an ERT, but it will be applied only when the Party accepts the adjustment or when the enforcement branch applies the adjustment in the event of a disagreement between the ERT and the Party.

Decision 20/CMP.1,  
annex, paragraphs 10–13

Adjustments may be applied to emissions and removals for the calculation of the assigned amount, to Annex A sources for years of the commitment period, and to emissions and removals for activities under Article 3, paragraphs 3 and 4. For activities under Article 3, paragraphs 3 and 4, for which a Party has chosen to account for the entire commitment period (rather than annually), adjustments can be considered only during the annual review for the last year of the commitment period.

Decision 22/CMP.1,  
annex, paragraphs 79–82

ERTs must follow strict procedures for adjustments. In particular, an ERT must alert the Party concerned to the particular inventory problem in question, and provide the Party with the opportunity to submit additional information or correct the problem. If a Party recalculates an inventory estimate during the review in order to correct a problem identified by the ERT, the Party must re-submit the complete CRF with the recalculated estimates.

The ERT may proceed with the calculation of an adjustment only if the Party is unable to correct the problem or to demonstrate that the estimate has been calculated correctly, within the specified time frame. The ERT will then calculate and document the adjustment, according to specific technical guidance, and recommend the application of the adjustment to the Party.

Decision 22/CMP.1,  
annex, paragraph 80 (e)

Decision 27/CMP.1,  
annex, section V, paragraph 5

The Party must decide whether it accepts or rejects the adjustment. If the Party accepts the adjustment, it will be applied. If it rejects the adjustment, then the Compliance Committee will determine whether to apply the adjustment. Any adjustments that are applied, either by acceptance by the Party or by the enforcement branch, will be recorded in the CAD.

With the exception of adjustments applied to emissions used in the calculation of the initial assigned amount, any adjustment may be removed if the Party is able to recalculate the estimate correctly in any of its subsequent GHG inventory submissions, but no later than the last inventory submission for the commitment period. Adjustments applied to emissions used in the calculation of the initial assigned amount may not be removed because a Party's initial assigned amount cannot be changed after it is recorded in the CAD.

#### 5.2.3.2. ELIGIBILITY TO PARTICIPATE IN THE MECHANISMS

Decision 15/CMP.1,  
paragraph 3

A late submission (more than six weeks after the due date), gaps in a Party's inventory or adjustments to Annex A emission estimates can affect a Party's eligibility to participate in the Kyoto mechanisms. If the Compliance Committee determines that a Party fails to meet the requirements for submission of the most recent national inventory, it will suspend the Party's eligibility to participate in the mechanisms (see CHAPTER IV).

#### 5.2.3.3. ELIGIBILITY TO ISSUE REMOVAL UNITS

Decision 13/CMP.1,  
annex, paragraph 26

Decision 18/CMP.1,  
paragraph 1

Instead of affecting a Party's eligibility to participate in the Kyoto mechanisms, problems with the inventory of emissions and removals for activities under Article 3, paragraphs 3 and 4, can affect its ability to issue RMUs. If the magnitude of adjustments applied to emissions and removals from a single activity in a single year of the commitment period exceeds 9 per cent, the Party cannot issue RMUs for that activity for that year. To make this determination, the magnitude of the adjustments is calculated as the absolute value of the 'adjusted net estimate for the activity minus the submitted net estimate for the activity', divided by the sum of the absolute values of all submitted components for the activity, multiplied by 0.18.<sup>9</sup>

Problems with a Party's inventory for activities under Article 3, paragraphs 3 and 4, do not affect a Party's obligation to cancel units for net emissions from these activities (i.e. net source cancellation (see CHAPTER VI.3.1.2)). Regardless of the magnitude of adjustments applied, a Party will always be required to cancel units for net emissions from an Article 3, paragraph 3, activity or an elected Article 3, paragraph 4, activity.

## VI. ASSIGNED AMOUNT-RELATED REQUIREMENTS

### 6.1. CALCULATION OF ASSIGNED AMOUNT

Decision 13/CMP.1 ,  
paragraph 2

The exact quantity of each Party's initial assigned amount in t CO<sub>2</sub> eq must be calculated prior to the commitment period or within one year of the entry into force of the Kyoto Protocol for that Party, whichever is later.

#### 6.1.1. REQUIREMENTS

Article 3,  
paragraph 7

In general, a Party's initial assigned amount should be calculated by multiplying its Annex A emissions in the base year by its emissions target in Annex B and then multiplying that value by five.<sup>10</sup> However, the Kyoto Protocol has several special provisions that may alter the way in which a particular Party's assigned amount is calculated. These special provisions are discussed below.

##### 6.1.1.1. ALTERNATIVE BASE YEAR OR PERIOD

Article 3,  
paragraph 5

Decision 13/CMP.1,  
annex, paragraph 5 (a)

Decision 9/CP.2,  
paragraph 5

Decision 11/CP.4,  
paragraph 13

For most Parties, 1990 is the base year for the national GHG inventory and the calculation of the assigned amount. However, five Parties – Bulgaria, Hungary, Poland, Romania and Slovenia – have elected under a decision by the COP to use an alternative base year. The base year for each of these Parties is as follows:

- Bulgaria: 1988;
- Hungary: the average of the years 1985–1987;
- Poland: 1988;
- Romania: 1989;
- Slovenia: 1986.

For these Parties, the assigned amount should be calculated using the Annex A emissions in their specified base year or period, rather than 1990.

<sup>9</sup> The value 0.18 was selected as an indicator of the average share of the LULUCF emissions and removals relative to total emissions for Annex I Parties (see annex to decision 18/CMP.1).

<sup>10</sup> The value of an individual Party's total Annex A emissions can be found at the bottom of CRF table summary 2: 'Total CO<sub>2</sub> equivalent emissions without land use, land-use change and forestry'.

6.1.1.2. BASE YEAR FOR HYDROFLUOROCARBONS, PERFLUOROCARBONS  
AND SULPHUR HEXAFLUORIDE

Article 3,  
paragraph 8

Decision 13/CMP.1,  
annex paragraph 5 (a)

In addition, any Party may choose to use the 1995 values for emissions from HFCs, PFCs and SF<sub>6</sub> in the calculation of its assigned amount, rather than its base year values for these gases. This choice must be indicated clearly in the initial report. If a Party chooses to use 1995, then it must do so *collectively* for all F-gases. For example, a Party cannot choose to use 1990 as the base year for HFCs and 1995 for PFCs.

In order to use 1995 values in the calculation of the assigned amount, a Party should simply deduct the total emissions of HFCs, PFCs and SF<sub>6</sub> reported for 1990 (or other specified base year) from the Annex A totals, and add the total emissions of HFCs, PFCs and SF<sub>6</sub> reported for 1995.

6.1.1.3. ARTICLE 4 ARRANGEMENT

Article 4

Article 4 of the Kyoto Protocol allows Parties to form agreements to fulfil their Article 3 commitment jointly. At the end of the commitment period, the Parties to the agreement will be considered to be in compliance if their total combined emissions are less than or equal to their total combined assigned amount. The Parties to the agreement may re-distribute their respective emission levels among themselves, without affecting their overall assigned amount, and record the resulting percentage commitments in the agreement.

To date, only the European Community (EC) and its member States have notified the secretariat of such an agreement. Under the terms of their agreement, each member State has an individual emissions target which is different from that established under Annex B to the Kyoto Protocol. For the first commitment period, the agreement applies only to the 15 Parties that were members of the EC when it ratified the Kyoto Protocol.

Any Party that is part of an arrangement under Article 4 uses the percentage listed for it in that agreement to calculate its assigned amount, instead of the percentage listed in Annex B to the Kyoto Protocol.<sup>11</sup> For several EC member States, including Denmark, the Netherlands and the United Kingdom of Great Britain and Northern Ireland, the geographical coverage of these Parties is not the same under the Article 4 agreement when compared to the coverage of these Parties when reporting individually under the Kyoto Protocol.



Article 3,  
paragraph 7

Decision 13/CMP.1,  
annex, paragraph 5 (b)

#### 6.1.1.4. EMISSIONS FROM THE CONVERSION OF FORESTS

For most Parties, the calculation of assigned amount is based on Annex A emissions only. However, if a Party has net emissions from the LULUCF sector as a whole in its base year, then it should add the net emissions from the conversion of forests to other land uses (deforestation) to its base year emissions from Annex A sources for the calculation of its assigned amount.

In order to determine whether emissions from deforestation should be included in the calculation of the assigned amount, a Party should first determine whether it has net emissions from the LULUCF sector as a whole in its base year. This value is reported in CRF summary table 2, under category 5 (LULUCF). If the value reported for the total of category 5 is positive (net emissions), the Party should next determine whether it has net emissions from forest conversion.

Forest conversion emissions are reported as an information item in CRF table 5 under 'Forest land converted to other land-use categories'. These cells show the sum of all net emissions from forest land converted to any other land category (e.g. forest land converted to cropland, forest land converted to grassland, etc.). If the values reported here are also positive, then the Party should add the emissions from forest conversion in its base year to its total emissions from Annex A sources for the calculation of its assigned amount.

#### 6.1.2. REPORTING

Decision 13/CMP.1,  
annex, paragraph 7 (b – d)

Each Annex I Party must report its calculation of its assigned amount in its initial report, along with its selected base year for HFCs, PFCs and SF<sub>6</sub>. If the Party is part of an arrangement under Article 4, the Party must also include this agreement in its initial report.

<sup>11</sup> The estimates of base year emissions, as included in the initial report of the European Community, result in slightly less assigned amount being distributed to the 15 member States than is allowed for the European Community as a whole. This difference arises from the percentages in the Article 4 agreement (FCCC/CP/2002/2) having been based on estimates of base year emissions made in 1998. The European Community has decided that the residual assigned amount be held on behalf of the Community as a whole.

### 6.1.3. REVIEW AND COMPLIANCE PROCEDURES

The Party's calculation of its assigned amount in the initial report will be reviewed by an ERT to assess whether it has been calculated correctly and to ensure that it is based on reliable inventory estimates. Any questions of implementation regarding this calculation will be resolved by the enforcement branch of the Compliance Committee. If any adjustments are applied to the Party's emissions for the calculation of the initial assigned amount, then the initial assigned amount will be corrected based on the adjusted estimates of emissions.

Decision 13/CMP.1,  
annex, paragraph 52 (a)

After completion of the review and compliance procedures, the Party's initial assigned amount will be recorded in the secretariat's CAD and forwarded to the ITL. Once the ITL has this information, the Party can initiate issuance of AAUs, up to the level of its recorded initial assigned amount. Once the initial assigned amount is recorded, it is permanent for the commitment period and cannot be changed.

## 6.2. THE COMMITMENT PERIOD RESERVE

### 6.2.1. REQUIREMENTS

Decision 11/CMP.1,  
annex, paragraphs 6 and 8

Each Party is required to maintain a minimum quantity of Kyoto units in its national registry at all times. This minimum quantity, the CPR, was established in order to reduce the risk of a Party transferring away Kyoto units to such an extent that it would later experience compliance difficulties.

The level of the CPR must equal the lower of *either* 90 per cent of its initial assigned amount *or* 100 per cent of its Annex A emissions in its most recently reviewed inventory, multiplied by five. Each Party should ensure that it calculates its CPR by using the approach that yields the lowest value. For most Parties, 90 per cent of the initial assigned amount will yield a lower number than the calculation based on the inventory. However, for some Parties, notably economies in transition, the calculation based on the most recent inventory will yield a lower value.

Where a regional economic integration organization is itself a Party to the Kyoto Protocol and a Party to an Article 4 agreement,<sup>12</sup> it also has a CPR based on the emission limitation or reduction commitment inscribed for it in Annex B. This CPR is based on the total quantity of Kyoto units held by all Parties to the Article 4 agreement, and applies in addition to the CPRs of the individual Parties to the agreement.

Decision 13/CMP.1,  
annex, paragraph 57

Decision 11/CMP.1,  
annex, paragraphs 7 and 10

Decision 9/CMP.1,  
annex, paragraph 41

Each Party's CPR will be recorded in the CAD and made available to the ITL. The ITL will check each external transfer by a Party to ensure that the Party's registry contains a sufficient quantity of units to carry out the transfer without infringing on the CPR. The first transfer by the host Party of an ERU verified under JI Track 2 is exempt from the CPR requirement because the JI Track 2 procedures ensure that the transfer of ERUs is accompanied by a corresponding reduction in domestic emissions.

Decision 11/CMP.1,  
annex, paragraph 9

Only Kyoto units in a registry's retirement or holding account count towards the Party's CPR; units in cancellation accounts do not. If a Party attempts to make an external transfer that would result in the registry holdings dropping below the required level of the CPR, the ITL will identify the transaction as a discrepancy and notify the Party that it must terminate the transaction. In addition, if the required level of the CPR changes based on the annual inventory submission, or if a cancellation of units by the Party results in an infringement upon the CPR, the ITL will notify the Party that it must bring its holdings up to the required level within 30 days.

#### 6.2.2. REPORTING

Decision 13/CMP.1,  
annex, paragraph 8 (a)

Each Party must report the calculation of its CPR in its initial report and in each annual report submitted under the Kyoto Protocol.

Decision 15/CMP.1,  
annex, paragraph 18

Parties that calculate the CPR on the basis of the inventory should also ensure that they use the most recently submitted inventory (i.e. that in the current submission) in the calculation, as this will become the most recently reviewed inventory by the time the CPR is recorded in the CAD. This also applies to the annual reports that are voluntarily submitted in 2008 and 2009. For example, in the 2010 submission of the annual report, the CPR should be calculated using the 2008 inventory data.

Decision 15/CMP.1,  
annex, paragraph 12

If a Party has received notification regarding an infringement upon its CPR from the ITL, it should include information on this in the next annual report. This information should indicate whether the transaction was terminated and, if it was not terminated, the transaction number and serial numbers involved and an explanation of why the transaction was not terminated.

<sup>12</sup> For example, the EC.

### 6.2.3. REVIEW AND COMPLIANCE PROCEDURES

During the initial and annual reviews, the ERT will check that the Party has reported the CPR, and that it has correctly calculated the CPR on the basis of the approach that yields the lowest value. If the CPR is inventory-based and adjustments have been applied to Annex A emissions, the CPR will be recalculated based on the adjusted emissions.

[Decision 13/CMP.1,  
annex, paragraph 8](#)

[Decision 27/CMP.1,  
annex, section V, paragraph 4 \(b\)](#)

During the annual review, the ERT will also consider any information regarding infringement upon the CPR reported by the Party. The ERT will also consider the ITL discrepancy reports to ensure that any transactions that would have infringed upon the CPR have been terminated, and ITL notification reports to ensure that holdings have been restored to the CPR level in the event of CPR infringement. Questions of implementation regarding the CPR will be resolved by the enforcement branch.

### 6.3. THE NATIONAL REGISTRY

At the end of the commitment period, the determination of each Party's compliance with its emissions target will be made by comparing the Party's total Annex A emissions during the commitment period with its holdings of Kyoto units. These holdings, as well as transfers and acquisitions, will be tracked and recorded through a computerized system of registries.

[Decision 13/CMP.1,  
annex, paragraph 17](#)

Each Party is required to establish and maintain a national registry to track its holdings of and transactions of Kyoto units. Each national registry must comply with detailed rules for the accounting of assigned amount under Article 7, paragraph 4, and technical requirements developed pursuant to this Article. Each registry is connected to the ITL in order that the ITL may verify the validity of registry transactions involving Kyoto units to ensure that they conform to the rules for the accounting of assigned amount. Implementation of a national registry is a criterion for eligibility to participate in the Kyoto mechanisms.

Annex I Parties may establish supplementary transaction logs (STLs) to monitor and verify the validity of transactions proposed by their national registries, where such transactions are subject to the rules of national or regional trading schemes which operate in a manner consistent with the accounting of Kyoto units. Such STLs do not duplicate the Kyoto Protocol-related checks conducted by the ITL. The Community Independent Transaction Log (CITL), maintained by the European Commission to support the EU ETS, is an example of an STL.

Decision 24/CP.8,  
paragraph 2

Decision 16/CP.10,  
paragraph 2

Decision 12/CMP.1,  
paragraphs 2 and 3

### 6.3.1. REQUIREMENTS

Detailed technical requirements for national registries are laid out in the data exchange standards (DES). These standards have been developed by the secretariat, in consultation with registry developers and Parties, to ensure that the registries and the ITL use common procedures and technical specifications for communicating and exchanging data. The DES also apply to the CDM registry and to STLs. They will be revised over time, in accordance with change procedures established through the RSA forum, in order to reflect new requirements and technical practices. References in this manual are for version 1.1 of the DES, which was current at the time of writing. Parties are encouraged to refer to the most recent version of the DES for relevant registry requirements.

The DES provide detailed technical specifications for:

- Data security;
- Secure communications;
- The sequence of steps a registry must undertake to initiate and proceed with a transaction;
- Processes for reconciling data inconsistencies between the registry and the ITL;
- Explicit formats for messages to/from the ITL and registry, covering transaction types, accounts and units involved in the transaction, and possible transaction response codes;
- Procedures for connecting the registry to the ITL (called initialization), and testing the communications and transaction functions of the registry;
- Procedures for the technical operation of the registry.

Decision 16/CP.10,  
paragraph 6 (e)

DES, section 9

Before a national registry can be connected to the ITL, it will be subject to thorough testing of its functions and communications to ensure that it conforms to requirements. Called initialization, this process will test registry functions against the technical standards to ensure that all electronic communication, transaction and reconciliation processes are working correctly.

Once a registry has been initialized, the ITL will be able to continue to monitor the functions of the registry during normal operation and through its periodic reconciliation (see CHAPTER VI.4.1.4). If technical problems are identified during operation, the ITL will be able to temporarily suspend its link to the registry until the problems are resolved. Re-initialization testing may be undertaken to ensure that the problem has been successfully resolved.

Decision13/CMP.1,  
annex, paragraph 38  
DES, section 4.6

#### 6.3.1.1. TRANSACTION TYPES

Each registry must also meet specific requirements for seven types of transaction recognized by the Kyoto Protocol and the DES. These are:

- *Issuance:* The initial creation of a Kyoto unit, except in the case of an ERU (whereby the issuance process converts an existing AAU or RMU into an ERU);
- *External transfer:* The transfer of Kyoto units from one registry to another;
- *Cancellation:* The internal transfer of a unit to a cancellation account within a registry, in order that it may not be used for compliance purposes;
- *Replacement:* The internal transfer of a unit to a replacement account within a registry, in order to replace tCERs or ICERs;
- *Retirement:* The internal transfer of a unit to a retirement account within a registry, in order that it can be used by the Annex I Party to demonstrate compliance with its emissions commitment under Article 3, paragraph 1;
- *Carry-over:* The change of validity of a unit from one commitment period to the next, resulting in the unit being carried over to a subsequent commitment period;
- *Expiry date change:* The change in the expiry date of a ICER when the crediting period for a CDM project is renewed, or of a tCER when the end-date of the next commitment period is defined as a date other than that assumed for technical reasons upon issuance.

As these seven transaction types affect a Party's holdings of units available for use towards meeting its Article 3, paragraph 1, commitment, they must be checked and approved by the ITL. Transfers between two holding accounts within a Party's national registry are not covered by the Kyoto Protocol and do not affect the Party's holdings for compliance purposes. Therefore these internal transactions are not subject to ITL checks.

Each transaction must be initiated by the national registry or the CDM registry, and must follow a specific sequence of steps, during which the transaction is checked by the ITL. In some cases, a registry is notified by the ITL that it must undertake a specific transaction. Both the regular sequence of registry transactions, and related ITL checks and notifications, are described in [CHAPTER VI.4.1](#).

Decision 13/CMP.1,  
annex, paragraph 21

DES, appendix F, section 5

### 6.3.1.2. ACCOUNT TYPES

Each registry must contain several specific types of accounts. These account types are required under Article 7, paragraph 4, to facilitate the tracking of units and registry transaction obligations by the ITL. The account types for each national registry are:

- *Holding account(s).* Each registry must contain at least one account for holding the Party's Kyoto units. If the Party has authorized legal entities to participate in the Kyoto mechanisms, the registry must also contain a separate holding account for each legal entity;
- *Cancellation accounts.* Each registry must contain four distinct types of cancellation accounts:
  - A *net source cancellation* account that is reserved for units that the Party cancels to account for net emissions for activities under Article 3, paragraphs 3 and 4;
  - A *non-compliance cancellation* account reserved for the transfer of units when the Compliance Committee determines that the Party is in non-compliance with its Article 3, paragraph 1, commitment;
  - A *voluntary cancellation* account for the cancellation of units that are not required under the Kyoto Protocol rules; and
  - A *mandatory cancellation* account for the cancellation of invalid units (e.g. expired tCERs).
- *Replacement accounts.* Each registry must also contain at least four replacement accounts:
  - A *tCER replacement for expiry* account reserved for the transfer of units to replace expired tCERs;
  - A *ICER replacement for expiry* account reserved for the transfer of units to replace expired ICERs;
  - A *ICER replacement for reversal of storage* account for the transfer of units if a ICER has been subject to a reversal of storage; and
  - A *ICER replacement for non-submission of a certification report* account for the replacement of ICERs for which a required project certification report has not been submitted under the CDM.
- *Retirement account.* An account into which the Party must transfer units that it intends to use to meet its Article 3, paragraph 1, commitment. Units transferred to a Party's retirement account may not be further transferred;

Decision 16/CP.10,  
paragraph 5 (a)

### 6.3.1.3. INDEPENDENT ASSESSMENT REPORTS

The functional testing during initialization of national registries, as well as the ongoing testing and verification, will be conducted through an independent assessment process which uses standardized testing methods and procedures developed by the ITL administrator in cooperation with the RSA forum. The results of this process will be reflected in independent assessment reports on each national registry, which will be provided to review teams under Article 8.

Procedures for two types of independent assessment reports (IARs) have been established through the RSA forum:

- *Initial IAR:* Prepared once for each registry, prior to completion of the review of the Party's initial report, on the basis of results from the first initialization process for a registry. This IAR demonstrates that the registry concerned meets the necessary requirements at that point in time;
- *Standard IAR:* Prepared on an annual basis for the previous calendar year. This IAR includes results of any partial or full re-initialization activities undertaken by the registry during the year, as well as information on the registry's operational performance and the public availability of information.

### 6.3.2. REPORTING

Decision 15/CMP.1,  
annex, paragraph 32

Each Party must also include a description of its national registry in its initial report and in each national communication submitted under the Kyoto Protocol, and explain how the registry meets the registry requirements and DES. The description must include the following information:

- (a) The name and contact information for the registry administrator;
- (b) The names of any other Parties with which the Party cooperates by maintaining their national registries in a consolidated system;
- (c) A description of the database structure and capacity of the national registry;
- (d) A description of how the national registry conforms to the technical standards for data exchange;
- (e) A description of the procedures employed in the national registry to minimize discrepancies and of the steps taken to terminate transactions where a discrepancy is notified and to correct problems in the event of a failure to terminate a transaction;



- (f) An overview of security measures employed in the national registry;
- (g) A list of the information publicly accessible by means of the user interface to the national registry;
- (h) The Internet address of the interface to the national registry;
- (i) A description of measures taken to safeguard, maintain and recover data in order to ensure the integrity of data storage and the recovery of registry services in the event of a disaster; and
- (j) The results of any test procedures.

[Decision 15/CMP.1,](#)  
[annex, paragraph 22](#)

In addition, each Party must include in the annual report information on any significant changes in its national registry.

#### 6.3.3. REVIEW AND COMPLIANCE PROCEDURES

Each Party's national registry will be subject to a thorough assessment during the initial review. The IARs will be critical in this regard, as they will contain the results of thorough testing of the functioning of each individual registry and its conformity with the registry requirements and the DES.

The national registry will be subject to ongoing testing and monitoring through the independent assessment and reconciliation processes. Any unresolved problems with respect to the required functions of the national registry and the completeness of information submitted by the Party regarding a significant change to its national registry will be reflected in the standard IAR, which will be available for consideration by the ERTs.

Questions of implementation regarding a Party's national registry will be resolved by the enforcement branch of the Compliance Committee. If the enforcement branch determines that a Party fails to meet the requirements for implementation of the national registry, it will suspend the Party's eligibility to participate in the Kyoto mechanisms.

#### 6.4. REGISTRY TRANSACTIONS

[Decision 13/CMP.1,](#)  
[annex, paragraphs 23–37, 43](#)

This section gives an overview of the technical procedures for registry transactions and describes the reporting and review of transactions. Individual transaction types and the corresponding Kyoto accounting rules are described in [CHAPTER VII](#).

Decision 13/CMP.1,  
annex, paragraphs 41–43  
DES, sections 4.3 and 4.4

#### 6.4.1. REQUIREMENTS

##### 6.4.1.1. SEQUENCE OF REGISTRY TRANSACTION MESSAGES

All transactions requiring ITL approval must send and receive messages in a specific sequence of steps, outlined below and shown in [FIGURE VI-6](#). More detailed information on message sequences and response codes is provided in the DES. Transactions are normally conducted as blocks of units, rather than on a unit-by-unit basis. Discontinuous unit blocks can be processed in one transaction.

*Message 1 – Proposal.* The registry sends a proposal for the transaction to the ITL. The proposal must contain the transaction type, the units involved, the appropriate transferring and acquiring registry and account information, and the appropriate notification identification (ID) information, where appropriate. The ITL receives the proposal and validates the transaction against the technical and policy-related rules for the appropriate transaction type.

If a discrepancy is found, the ITL notifies the registry of the requirement(s) that were not met by the transaction proposal. The units involved in the transaction cannot be used in another transaction until the registry terminates the transaction. If the transaction meets all of the requirements, the ITL records the transaction as pending and marks the units involved in the transaction as unavailable to any other transaction.

A number of optional steps are now possible:

- *Messages 1.1 and 1.2.* For transactions to or from registries which are part of a regional emissions trading scheme for which an STL is in operation, the ITL forwards the transaction proposal to the STL concerned. The STL evaluates the proposal against STL rules and requirements and informs the ITL of its acceptance or rejection. If the STL identifies one or more discrepancies, the ITL will notify the registry and indicate the type of discrepancy found.
- *Messages 2 and 3.* If the transaction is an external transfer of units (e.g. a transfer of units to another registry), the ITL forwards the transaction proposal and the results of its review to the acquiring registry. The acquiring registry evaluates the proposal, accepts or rejects it and informs the ITL accordingly.

- *Message 4 – ITL relay.* The ITL updates the transaction status with the result of the acquiring registry evaluation and notification and forwards the evaluation result to the initiating registry. Once the registry has processed the ITL notification, it must complete the transaction, either by finalizing it (if no discrepancy is found) or by terminating it.
- *Message 5 – Transaction completion.* If the registry, or both registries in the case of an external transfer, have finalized the transaction, the ITL updates its records for the units in the transaction. The units are now free to be used in any other transaction. If the initiating registry instead terminates the transaction, the ITL will mark the transaction as terminated and free the units that were part of the transaction to be used in another transaction.

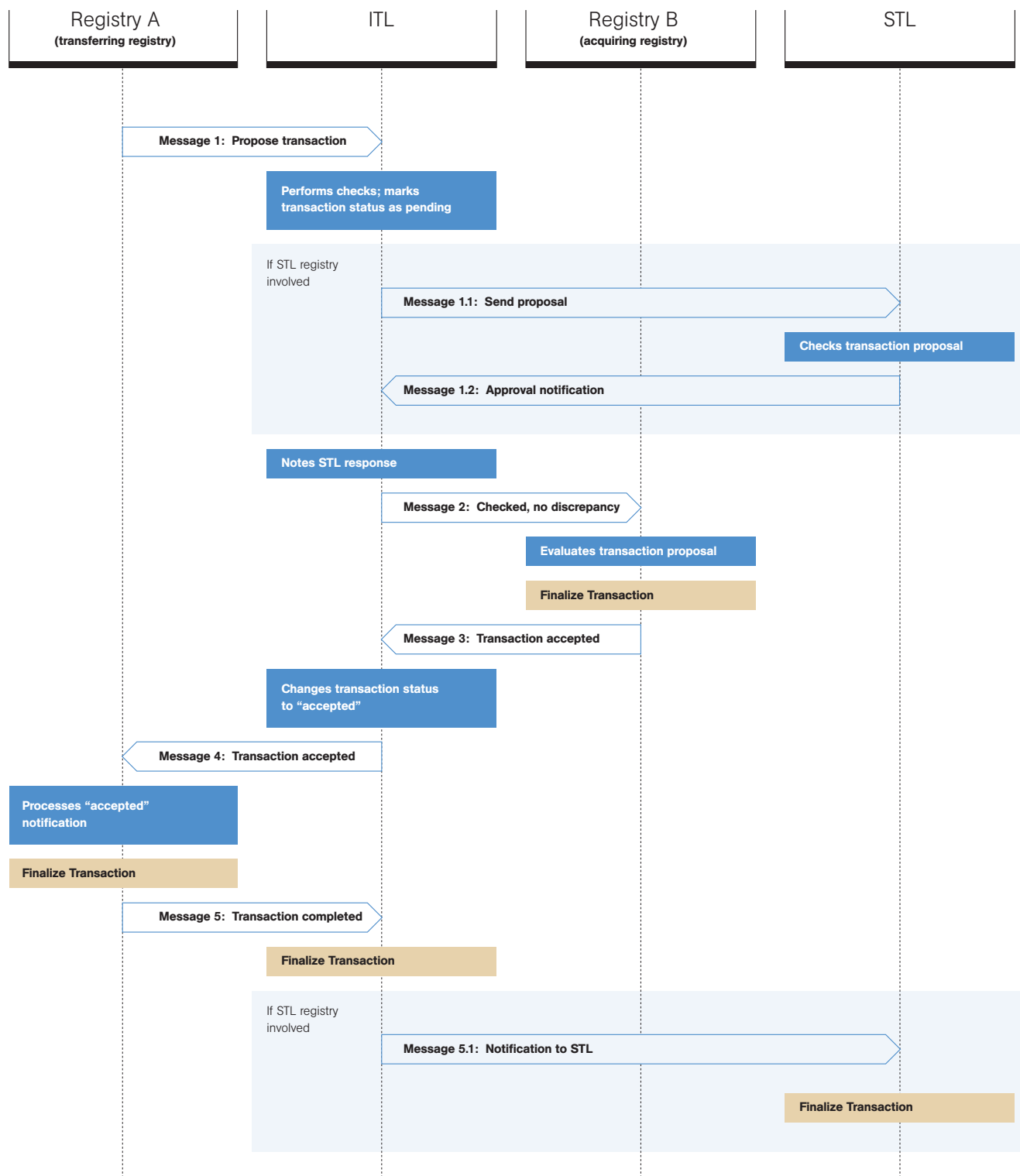
An optional step is possible:

- *Message 5.1.* If a STL is involved in validating the transaction, the ITL will inform the STL.

Decision13/CMP.1,  
annex, paragraph 43 (b)

A unit will be considered valid in a particular registry only if all transactions relating to that unit have been approved by the ITL. If any transaction involving a particular unit is rejected by the ITL and the initiating registry does not terminate the transaction, then an inconsistency between the registry data and the ITL data will be identified during future reconciliation processes, and any further proposed transactions involving that unit will be rejected by the ITL until the registry corrects the problem.

Figure VI-6. Sequence of Registry transactions



#### 6.4.1.2. INTERNATIONAL TRANSACTION LOG TRANSACTION CHECKS

During the ITL review stage of a transaction sequence, the ITL executes numerous checks on each transaction to ensure that the message is authentic, that the format and sequence of the message are correct, and that the unit and transaction in question are valid. Although many of these checks are technical in nature, the majority of the checks performed by the ITL are policy-related checks to ensure each transaction is in conformity with the Kyoto Protocol accounting rules. The DES also encourage national registries to implement similar checks to reduce the number of discrepancies that occur.

The following categories of technical checks are performed by the ITL:

DES, section 4.6.1

- *Version and authentication checks* authenticate the identity of the initiating registry and ensure that an appropriate version of the DES is used;

DES, section 4.6.2

- *Message viability checks* ensure that the transaction has not become invalid through more than 24 hours having elapsed since the time it was initiated;

DES, section 4.6.3

- *Registry validation checks* ensure that the registry has the appropriate operational status to undertake the transaction (a registry may be in fully-operational, reconciliation-only or not-operating mode);

DES, section 4.6.4

- *Data integrity checks* ensure that the values in the transaction proposal are completed, appropriately formatted and within valid ranges;

DES, section 4.6.5

- *Message sequence checks* ensure that the messages on the proposed transaction are communicated to the ITL in the appropriate sequence.

The following categories of policy-related checks are performed by the ITL in order to ensure the conformity of the transaction with the accounting rules under the Kyoto Protocol:

DES, section 4.6.6

- *General transaction checks* are performed on all proposal messages relating to all types of transactions except for issuance. For example, the checks ensure that the units are held by the registry initiating the transaction, are not involved in another transaction, and have not previously been cancelled or retired;

DES, section 4.6.7

- *Transaction-specific checks* are differentiated by transaction type, such that only relevant checks are applied to a particular transaction. For example, an issuance transaction is checked to ensure that the quantity of AAUs to be issued does not exceed the level of assigned amount recorded in the CAD and that the serial numbers have not been used previously. An external transfer of units is checked to confirm that the transferring Party is eligible to participate in such a transaction, that the acquiring Party is also eligible, and that the transfer would not infringe upon the CPR of the transferring registry.

Decision13/CMP.1,  
annex, paragraph 43

If the transaction proposal passes all checks, the ITL returns a positive message (approved) to the initiating registry, and the transaction continues. However, if a transaction proposal fails a check, the ITL returns a negative message (disapproved), indicating the nature of the failure. Upon receipt of a negative message, the registry must terminate the transaction. If a registry fails to terminate a transaction, an inconsistency in that registry's holdings will be identified during the next registry reconciliation with the ITL.

#### 6.4.1.3. NOTIFICATIONS

On occasion, the ITL will notify a registry of specific transactions that the registry must undertake in order to comply with the accounting rules under the Kyoto Protocol. These notifications are explained below.

DES, section 6.2.1

- *Net source cancellation.* If the review and Compliance Committee procedures under the Kyoto Protocol find that the LULUCF activities of a Party have resulted in a net source of emissions, the ITL will notify the Party of the quantity of units the registry is required to cancel. These units must be cancelled into the Party's net source cancellation account. The registry must complete the cancellation within 30 days, providing reference to the relevant notification ID so that the ITL can track when the registry has completed the required cancellation;

DES, section 6.2.2

- *Non-compliance cancellation.* If the Compliance Committee determines that a Party is in non-compliance with its Article 3, paragraph 1, commitment, the ITL will notify the Party of the quantity of units valid for the subsequent commitment period that it is required to cancel. These units must be cancelled by transfer into the Party's non-compliance cancellation account. The registry must complete the cancellation within 30 days, providing reference to the relevant notification ID so that the ITL can track when the registry has completed the required cancellation;

DES, section 6.2.3

- *Impending tCER or ICER expiry.* The ITL will notify each national registry of the unit blocks of any tCERs held in retirement and tCER replacement accounts, or ICERs held in retirement accounts, that are due to expire within 30 days. The registry must initiate the replacement within 30 days, providing reference to the relevant notification ID so that the ITL can track when the registry has completed the required retirement. Units used to replace tCERs and ICERs must be transferred to the appropriate replacement accounts;

DES, section 6.2.4

- *Reversal of storage for CDM project.* If a reversal of storage of emission removals has occurred for a CDM project for which ICERs have been issued, then, at the request of the CDM Executive Board, the ITL will temporarily suspend transfers of all ICERs generated by the project (except those to cancellation or replacement accounts). The ITL will then calculate how many units each registry must replace, on the basis of their holdings (excluding cancelled or previously replaced units) of the affected ICERs and the amount of storage reversal that occurred (as a proportion of the units generated by the project), and notify each affected registry of the requirement to replace this quantity of ICERs within 30 days. The registry must then complete the replacement transactions, providing reference to the notification ID so that the ITL can track when the registry has completed the required replacement. Once the required replacement has been completed, the ITL will restore the eligibility of the ICERs for transfer;

DES, section 6.2.5  
Decision 5/CMP.1,  
annex, paragraph 33

- *Non-submission of certification report for CDM project.* If the participants in a CDM project have not submitted a certification report for the project within five years of the last report, then, at the request of the CDM Executive Board, the ITL will make ICERs generated by the project ineligible for transfer (except to ICER replacement and the mandatory cancellation accounts). The ITL will notify each affected registry that these ICERs must be replaced or cancelled within 30 days. The registry must then complete the replacement transactions, providing reference to the identifier of the notification ID so that the ITL can track when the registry has completed the required replacement;

DES, section 6.2.6

- *Excess issuance for CDM projects.* If the CDM Executive Board requires a DOE to transfer units to a cancellation account, within 30 days, as a result of excess CERs, tCERs or ICERs having been issued for a CDM project, it will inform the DOE of this requirement and provide it with a notification ID. The ITL will notify registries of the required cancellation to be undertaken by the DOE, using the same notification ID provided to the DOE by the CDM Executive Board. The units must be cancelled into the Excess Issuance Cancellation Account (Account Type Code 240) at the CDM registry.

DES, section 6.2.7

The entity is responsible for ensuring that sufficient transactions occur, via registries, providing reference to the relevant notification ID so that the ITL can track when the required cancellation has been completed. The registry itself does initiate the cancellation and receives the notification ID only for technical purposes;

DES, section 6.2.8

- *Commitment period reserve infringement.* If the ITL determines that the total holdings in a national registry are lower than the CPR, because of cancellation or replacement of units or an increase in the required level of the Party's CPR, the ITL will send a notification to the registry directing the Party to increase the level of its unit holdings within 30 days. In order to meet this requirement, the registry must then acquire sufficient units from other registries or issue additional quantities of removal units that have been previously cleared for issuance. Since transactions are submitted by the transferring, not acquiring, registry, these transactions will not reference any notification ID;
- *Unit carry-over.* At the end of the true-up period and after the Compliance Committee has completed its consideration of all information reviewed under Article 8, Parties will be able to initiate carry-over of units, so that they can be used in the subsequent commitment period. The ITL will only approve carry-over of units if the registry has undertaken all necessary transactions for the current commitment period, including retirement, cancellation and replacement of units, and any corrections applied by the Compliance Committee. The ITL will notify each registry of the number of units which the registry may carry over. The registry will then initiate carry-over transactions, up to the limit specified in the notifications and subject to applicable carry-over rules for specific Kyoto unit types, within 30 days. For all carry-over transactions, the transaction must contain the appropriate notification ID. The registry will cancel, within 30 days, any units remaining in holding accounts which are not carried over;
- *Expiry date change.* The ITL will notify registries holding affected units when an expiry date change is required for tCERs or lCERs. In the case of tCERs, the notification will reference the Original Commitment Period Identifier of the affected units. In the case of lCERs, the notification will reference the Project Number associated with these units. In both cases, the notification will include the new expiry date. The registry must then complete the expiry date change transactions within 30 days, providing references to the notification ID so the ITL can track when the registry has completed the required transactions.



#### 6.4.1.4. RECONCILIATION

Decision 24/CP.8,  
annex, paragraphs 25, 26

Each registry's information on its unit holdings will be compared periodically with the ITL information on the holdings in that registry. If any differences are identified (e.g. due to the failure of a registry to terminate a discrepant transaction), these differences will be flagged as inconsistencies. The inconsistencies will be logged, and the registry administrator will be informed and requested to work with the ITL administrator to resolve them. This process is known as reconciliation and will be conducted in accordance with procedures established through the RSA forum.

DES, section 5

The reconciliation process will compare the data on unit holdings in the registry to the data on unit holdings for that registry in the ITL on the basis of 'snapshots' taken at specific points in time. If any inconsistencies are identified between the registry data and the ITL data, the ITL will freeze the units in question, so that the units may not be involved in subsequent transactions until the inconsistencies are resolved. The registry will be required to provide the transaction history of the units in question, in order to identify the cause of the inconsistencies. Once the cause of the inconsistencies has been identified, the registry and/or the ITL will take steps to resolve them manually in accordance with the DES.

A reconciliation action is completed when no inconsistencies are discovered or when any inconsistencies discovered have been resolved.

#### 6.4.2. REPORTING

##### 6.4.2.1. ANNUAL REPORTS

Decision 15/CMP.1,  
annex, part I, section E

Each Party must include information on its aggregate holdings of and transactions of Kyoto units in its annual report. Each Party is required to begin submitting this information the year after it first transfers or acquires units. It is expected that many Parties will begin reporting this information in their 2009 annual reports.

Decision 14/CMP.1,  
paragraph 2 and annex

Decision 15/CMP.1,  
annex, paragraph 20

Decision 16/CP.10,  
paragraph 6 (j)

The information must be reported in the SEF, which is due in conjunction with the annual inventory on 15 April of the reporting year (see CHAPTERS III.2.1 and III.3.1 for discussion of the information to be included in the SEF). The information in the SEF should come directly from the national registry and should cover holdings of and transactions of units for the previous calendar year. The ITL administrator, in cooperation with the RSA forum, has developed additional technical procedures for submission of the SEF to the secretariat.

The information contained in the SEF is determined by the reporting guidelines under Article 7, paragraph 1. It is structured around six sets of tables:

- A summary of the holdings of Kyoto units in the Party's national registry is provided in two tables, one prepared at the beginning of the previous calendar year and the other at the end. These holdings are aggregated by unit type and account type. The account types match those required by the DES for national registries. It should be noted that Parties are not required to report holdings for individual accounts; they are only required to report the total holdings of all accounts belonging to each account type;
- An interim set of tables provides a summary of registry transactions during the previous calendar year – both internal transactions and external transactions involving transfer or acquisition between registries. Transactions that result in additions to the assigned amount are reported under 'additions'. Transactions that result in subtractions from the assigned amount are reported under 'subtractions';
- A separate table provides detailed information on the expiry and replacement of tCERs and lCERs;
- A summary table shows the cumulative additions and subtractions, and retirements and replacements, of units to date for the commitment period;
- Any corrective transactions that a Party undertakes to implement a correction applied by the Compliance Committee should be reported in a separate table to ensure that the transaction is not double counted in the CAD.

Decision 14/CMP.1,  
paragraph 2

Decision 16/CP.10,  
paragraph 6 (f)

At time of publication, the ITL administrator was developing technical guidance to assist Parties in generating and providing SEF information, on the basis of national registry data, in a manner which facilitates the receipt and processing of the information by the secretariat.

#### DISCREPANCIES AND INCONSISTENCIES

Decision 15/CMP.1,  
annex, paragraph 12

Decision 13/CMP.1,  
annex, paragraph 43 (b)

In addition to the SEF, each Party is also required to include information on transactions for which the ITL identified discrepancies in its annual report. A discrepancy will arise whenever a national registry initiates a transaction that is not allowed under the Kyoto Protocol rules. The Party is also required to include information on whether these transactions have been completed or terminated. If the transactions have not been terminated, the Party is required to provide the quantities and serial numbers of the units involved and may also be required to explain why the transactions were not terminated.

Decision 15/CMP.1,  
annex, paragraph 16

Each Party is also required to include additional information on units held in registries which are invalid for compliance purposes. Information on units in cancellation and replacement accounts is already included in the SEF. Units for which an inconsistency has been identified through the reconciliation process, but has not been resolved, will also be invalid for further transactions, including retirement for compliance purposes and Parties must provide information on the quantity and serial numbers of these units.

#### NOTIFICATIONS FOR REPLACEMENT

Decision 15/CMP.1,  
paragraphs 13–15

Each Party must also include information in its annual report on any notifications that it has received from the ITL regarding replacement of ICERs for non-submission of the certification report or reversal of storage. If the replacement was not carried out, the Party is required to provide the quantity and serial numbers of the tCERs and ICERs involved and the reasons why the replacement was not carried out.

Decision 14/CMP.1,  
paragraph 2

Decision 16/CP.10,  
paragraph 6 (f)

The ITL administrator has been requested to develop a SEF for the reporting by Parties of these notifications. Parties are encouraged to use this format for submission of this information under Article 7, paragraph 1.

#### 6.4.2.2. THE TRUE-UP PERIOD REPORT

Refer to [CHAPTERS II.4.1.3](#) and [III.3.1](#) for information on the true-up period and the true-up report.

#### 6.4.3. REVIEW AND COMPLIANCE PROCEDURES

Decision 22/CMP.1,  
paragraph 5, and  
annex, part III

The information reported by each Party on its holdings of and transactions of Kyoto units will be subject to review and compliance procedures annually and at the end of the true-up period. Once the Party's holdings and transactions have been reviewed and any questions of implementation resolved, additions to and subtractions from the Party's assigned amount will be recorded in the CAD.

During the review, the ERT will assess the Party's reported information in the SEF for completeness and for consistency with the information maintained by the ITL for that Party. If differences are identified, the ERT will be able to access additional information from the ITL to help the ERT identify the nature of the differences (i.e. the underlying discrepancies, transaction types, dates, and quantities of units involved).

The ERT will also review any unfulfilled notification reports from the ITL, indicating that the Party has not undertaken a transaction required by the Kyoto Protocol rules. The ERT will consult with the Party concerned and with the ITL administrator to determine whether the Party has undertaken the required transaction.

[Decision 22/CMP.1,  
annex, paragraph 93 \(a\)](#)

[Decision 14/CMP.1,  
paragraph 3](#)

If an ERT identifies a question of implementation with a particular transaction, it may recommend that the enforcement branch apply a correction to the Party's accounting of assigned amount. For instance, if a Party has failed to cancel units for emissions under an Article 3, paragraph 3, activity (net source cancellation), it can recommend that the required cancellation be recorded as a correction in the CAD. Once the Party has undertaken the cancellation, the correction will be removed. However, if the Party fails to undertake the cancellation prior to the end of the true-up period, then the equivalent quantity will be subtracted from the Party's assigned amount for the determination of its compliance with its Article 3, paragraph 1, commitment.

If the enforcement branch determines that a Party has failed to account for and report its assigned amount correctly, it will suspend the Party's eligibility to participate in the Kyoto mechanisms.

## VII. TRANSACTION RULES

Decision13/CMP.1,  
annex, paragraphs 23–43

This chapter explains the rules for individual transaction types and explains how the ITL will check the transactions for conformity with the Kyoto Protocol accounting rules.

### 7.1. ISSUANCE

Decision13/CMP.1,  
annex, part II, section B

Issuance is the term used to refer to the creation of an individual Kyoto unit. The ITL must have official data from the CAD regarding the quantity of units to be issued by a Party concerned before it will approve an issuance transaction.

DES, appendix F, section 4

When a unit is issued, the issuing registry must assign a unique serial number to that unit. The serial number must include:

- (a) The commitment period for which the unit is issued;
- (b) The Party of origin, identified with the two-letter International Organization for Standardization (ISO) country code;
- (c) The type of unit; and
- (d) The unit number.

Additional information must be included in the serial number for specific unit types. Detailed requirements for serial numbers are contained in the DES.

#### 7.1.1. ASSIGNED AMOUNT UNITS

Decision13/CMP.1,  
annex, paragraphs 23, and 24

AAUs must be issued pursuant to each Party's initial assigned amount under Article 3, paragraphs 7 and 8. Each Party must issue one AAU for each t CO<sub>2</sub> eq of its assigned amount, up to the level of its assigned amount. Each Party shall issue AAUs for the full quantity of its assigned amount, prior to undertaking other types of transaction.

DES, appendix E

A national registry cannot issue AAUs until the value of the Party's initial assigned amount has been recorded in the CAD and provided to the ITL. At this time, the registry may initiate the issuance of AAUs. For each proposed issuance, the ITL will compare the quantity of AAUs proposed, the value of the Party's initial assigned amount, and the total quantity of AAUs issued previously by the Party. If an issuance proposal would result in AAUs in excess of the Party's initial assigned amount, the ITL will reject the proposal. In this case, the registry must re propose issuance of a smaller quantity of AAUs.

#### 7.1.2. EMISSION REDUCTION UNITS

Decision13/CMP.1,  
annex, paragraph 29  
DES, appendix E

An ERU is generated by converting an existing AAU or RMU into an ERU, and adding a JI project identifier and a JI track number to the serial number of the original unit. For an emission reduction project, an ERU must be converted from an existing AAU. For LULUCF projects, an ERU must be converted from an existing RMU. The AAUs or RMUs must have been issued by the JI host Party.

Decision 3/CMP.3,  
paragraph 4 (c)

If a JI host Party is operating under Track 1, the Party may propose the conversion of an AAU or RMU to an ERU at any time, provided that the Party holds a sufficient quantity of valid AAUs or RMUs and that the project ID has been sent to the ITL from the JI information system. The ITL will check that the AAUs or RMUs proposed for the transaction are valid, and that the Party meets all the individual eligibility requirements for Track 1.

If a JI host Party is operating under JI Track 2, the ITL will require information from the JI information system on the type of the project (emission reduction or LULUCF), the project ID, and the quantity of JISC-verified emission reductions or removals associated with the project. The ITL will check that the Party meets the eligibility requirements for issuance under JI Track 2 and that the unit type for conversion (AAU or RMU) matches the project type. If these conditions are met, the ITL will approve the issuance of ERUs up to the level of verified emission reductions or removals.

## 7.1.3. REMOVAL UNITS

Decision 13/CMP.1,  
annex, paragraphs 25–27

Decision 18/CMP.1,  
paragraph 1

Each Party must issue RMUs on the basis of net removals from activities under Article 3, paragraphs 3 and 4. RMUs must be issued on an activity-by-activity basis, and may be issued only after the accounting quantity for that particular activity has been recorded in the CAD. A Party will not be allowed to issue RMUs for a particular activity if the magnitude of adjustments applied to its estimates of emissions and removals for that activity in that year exceeds a specific threshold (see also CHAPTER V.2.3.3).

DES, appendix E

For each activity for which a Party has chosen annual accounting, the accounting quantity will be recorded annually, and the Party must issue RMUs for any net removals each year. For each activity for which a Party has chosen commitment period accounting, the accounting quantity will not be recorded until the beginning of the true-up period, and the Party may not issue RMUs for net removals until this time.

For each issuance transaction, the ITL will compare the quantity of RMUs proposed to the total accounting quantity, and any units previously issued or units cancelled by the Party for that activity. If this value reflects a net removal, the Party's national registry may then propose the issuance of RMUs up to this level. The registry must include the specific activity in the serial number of the proposed RMUs (see CHAPTER VIII for additional information).

## 7.1.4. CERTIFIED EMISSION REDUCTIONS, TEMPORARY CERTIFIED EMISSION REDUCTIONS AND LONG-TERM CERTIFIED EMISSION REDUCTIONS

Decision 3/CMP.1,  
annex, paragraph 66

Decision 5/CMP.1,  
annex, paragraph 37

CERs, tCERs and lCERs may be issued only by the CDM registry. The Executive Board will direct the CDM registry to issue CERs, lCERs or tCERs on the basis of certified emission reductions or removals from a CDM project. The serial number of these units will include a project ID. In the case of tCERs and lCERs, the units will also be issued with an expiry date.

The issuance of these units will be monitored and validated by the ITL against the quantity of CERs, lCERs or tCERs specified by the Executive Board. If the acquiring registry has been initialized and is operational at the time of issuance, the units may be forwarded to the acquiring registry on the basis of the forwarding request submitted by the project participants. Alternatively, the units will remain in the CDM registry, either in holding accounts of project participants from non-Annex I Parties or in the pending account of the CDM registry awaiting distribution to project participants.

## 7.2. EXTERNAL TRANSACTIONS

## 7.2.1. TRANSFER

Decision 13/CMP.1,  
annex, paragraph 30

Decision 11/CMP.1,  
annex, paragraph 2

Decision 9/CMP.1,  
annex, paragraph 41

Decision 13/CMP.1,  
annex, paragraph 42 (b)

DES, appendix E

A Party that meets the eligibility requirements for emissions trading may transfer Kyoto units to another national registry at any time, provided that it maintains its appropriate CPR level. Similarly, a Party may transfer ERUs under JI provided that it meets the appropriate eligibility requirements for Track 1 or JI Track 2, and maintains its CPR.

Whenever a registry initiates an external transfer of units, the ITL will verify that the Party meets the eligibility criteria for the particular mechanism and that the transaction conforms to the rules set under the Kyoto Protocol. The ITL will reject the transfer if any of these requirements are not met.

Decision 11/CMP.1,  
annex, paragraphs 5 – 10

The ITL will then check whether the proposed transaction in Kyoto units would cause a Party's registry holdings to drop below the level of its CPR. If the transfer of units would result in an infringement on the CPR, the ITL will reject the entire transaction and direct the registry to terminate the transfer. For instance, if a registry initiates a transfer of 50 units and the last 10 would result in an infringement on the CPR, the ITL will reject the transaction for all 50 units. The transfer will not be approved unless the total quantity proposed is 40 units or less. It should be noted that the first transfer by the issuing Party of an ERU verified under the JISC procedures (JI Track 2) is exempt from the CPR requirement.

## 7.2.2. ACQUISITION

Decision 3/CMP.1,  
annex, paragraph 31

Decision 9/CMP.1,  
annex, paragraph 21

Decision 11/CMP.1,  
annex, paragraph 2

In general, a Party must meet all the eligibility criteria of the Kyoto mechanisms to acquire AAUs, ERUs, RMUs, CERs or tCERs from another Party. The exception is the acquisition of CERs, tCERs or ICERs from the CDM registry. Such acquisition is defined as a forwarding of units from the CDM registry under the rules of the CDM (for which the eligibility requirements relate only to the use (i.e. retirement) of CERs, tCERs and ICERs for compliance purposes), rather than a transfer under the rules of emissions trading.

As explained above, CERs, tCERs and ICERs issued will be held in a pending account of the CDM registry until the acquiring Party's registry is ready to receive the units. Once a Party's registry has been initialized and is operational with the ITL, the forwarding of CERs from the CDM registry to the Party's registry is possible.



Decision13/CMP.1,  
annex, paragraph 40

An acquiring registry cannot initiate a transfer; the transfer must be initiated by the transferring Party's registry.

### 7.3. CANCELLATION

Decision13/CMP.1,  
annex, paragraph 35

Cancellation refers to the internal transfer by a registry of a unit to a cancellation account. Units transferred to a cancellation account cannot be further transferred and are invalid for use towards meeting a Party's Article 3, paragraph 1, commitment.

DES, section 4.1.4

There are five different types of cancellation implemented under the Kyoto Protocol by registries and the ITL. Four of these cancellation types result in a transfer of units to the corresponding cancellation account in a Party's national registry; one cancellation type results in an external transfer of units into a cancellation account in the CDM registry.

#### 7.3.1. NET SOURCE CANCELLATION

Decision13/CMP.1,  
annex, paragraphs 12 (d) and 32

The first type of cancellation is called net source cancellation. It is undertaken by a Party to account for net emissions from a LULUCF activity under Article 3, paragraph 3 or 4.

DES, section 6.2.1

The process of net source cancellation is initiated by the ITL. When the ITL receives updated information from the CAD on a Party's accounting quantity to date for an activity, it will determine whether the Party is required to issue or cancel units for that particular activity at that point in time. If the Party is required to cancel units, the ITL will send notification of a net source cancellation to the Party's registry. This notification will indicate the specific activity type, the number of units to be cancelled and the notification ID.

Decision 5/CMP.1,  
annex, paragraph 52

Upon receipt of the notification from the ITL, the registry is required to transfer the appropriate number of AAUs, RMUs, ERUs or CERs to its net source cancellation account. tCERs and lCERs cannot be transferred to a net source cancellation account. The notification ID must be submitted with the cancellation transaction in order to enable the ITL to track the Party's cancellation against the total accounting quantity for that activity.

The ITL will periodically send a notification update to the Party until the required cancellation is completed. If the Party fails to transfer the required quantity of units to the net source cancellation account, the ITL will send an ‘unfulfilled notification’ report to the ERT for the next annual review. The ERT can recommend that the Compliance Committee apply a correction, in the amount of the outstanding cancellation, to the Party’s holding of units in the CAD.

#### 7.3.2. NON-COMPLIANCE CANCELLATION

Decision 27/CMP.1,  
annex, section XV, paragraph 5 (a)

Decision 13/CMP.1,  
annex, paragraphs 12 (e) and 37

A second type of cancellation must be undertaken if the Compliance Committee determines at the end of the commitment period that a Party is in non-compliance with its Article 3, paragraph 1, commitment. In this case, the Compliance Committee will deduct a quantity of units equal to 1.3 times the quantity of the Party’s excess emissions from the Party’s unit holdings for the subsequent commitment period (e.g. for non-compliance in the first commitment period, the deduction will be made against unit holdings for the second commitment period). The deduction of units will be recorded in the CAD and provided to the ITL.

DES, section 6.2.2

The ITL will send a non-compliance cancellation notification to the Party’s registry directing the Party to transfer the appropriate quantity of units into its non-compliance cancellation account within 30 days. Only AAUs, ERUs, CERs and RMUs may be used for non-compliance cancellation. The registry must include the notification ID with the cancellation transaction. Failure to undertake the transaction within 30 days will result in an unfulfilled notification report being sent to the ERT.

#### 7.3.3. VOLUNTARY CANCELLATION

Decision 13/CMP.1,  
annex, paragraphs 12 (f) and 33

DES, section 6.2.3

The Kyoto Protocol also allows for the voluntary cancellation of units. This would occur when a Party or legal entity voluntarily undertakes a cancellation that is not required by the Kyoto Protocol accounting rules. In this case, the ITL does not send a notification to cancel. Instead, the national registry initiates the transfer of units to its voluntary cancellation account. The ITL checks to ensure that the units in question are valid but performs no additional transaction checks.

## 7.3.4. EXCESS ISSUANCE CANCELLATION

Decision 13/CMP.1,  
annex, paragraphs 12 (d) and 32

This type of cancellation is to compensate for any excess issuance of CERs, tCERs or ICERs for a CDM project identified by the CDM Executive Board in the context of suspending or withdrawing the designation of a DOE. Cancellations are made into the Excess Issuance Cancellation account in the CDM registry. The DOE concerned is responsible for arranging that sufficient cancellation takes place to meet the decision by the Executive Board; however, the cancellation can occur from any registry and involve any type of unit. No registry is responsible for the fulfilment of this cancellation requirement.

The Executive Board will provide the DOE with a notification ID which is to be used with each transaction in fulfilment of the excess issuance cancellation. The ITL will send all registries a notification with the same notification ID, in order that registries are aware that cancellation transactions may be initiated using this notification ID. The DOE must fulfil the cancellation requirement within 30 days of being informed of it.

## 7.3.5. MANDATORY CANCELLATION

DES, appendix F, section 3

Cancellation into a mandatory cancellation account is necessary to clear units from holding accounts in national registries when they have been made permanently invalid for purposes of compliance. Circumstances under which units may be made invalid in this manner are:

Decision 5/CMP.1,  
annex, paragraph 53  
and appendix D, paragraph 3

- ICERs issued for a CDM project for which a certification report is not submitted in the appropriate timeframe;
- Units for a commitment period which remain in holding accounts after the carry-over of units from that commitment period has been completed.

Decision 14/CMP.1,  
annex, paragraph 36

Decision 13/CMP.1,  
annex, paragraph 53

In addition, this type of cancellation may be used as an alternative to the replacement of ICERs in cases of non-submission of a certification report and reversal of storage from a CDM project.

#### 7.4. REPLACEMENT OF TEMPORARY CERTIFIED EMISSION REDUCTIONS OR LONG-TERM CERTIFIED EMISSION REDUCTIONS

Decision 5/CMP.1,  
annex, paragraphs 42, 43  
and 46–50

DES, section 4.1.5

Replacement refers to the internal transfer by a national registry of a Kyoto unit to a replacement account to replace a tCER or ICER. tCERs and ICERs held in a Party's retirement or replacement account must be replaced by another unit before they expire. ICERs held in retirement or holding accounts must also be replaced upon 'reversal of storage' of the CDM project that generated the ICERs (see CHAPTER VII.4.2), or when the certification report for that project has not been submitted (see CHAPTER VII.4.3). The ITL maintains a record of which tCERs and ICERs have been replaced. Each unit may only be replaced once.

Replacement is similar to cancellation in that the replacing unit (the unit transferred to a replacement account) cannot be further transferred. The different types of replacement are explained below.

##### 7.4.1. EXPIRY

Decision 5/CMP.1,  
annex, paragraphs 42–44 and 47  
DES, appendix F

The emission removals associated with CDM LULUCF projects are considered to be potentially non-permanent in that removals achieved by these projects are at risk of being re-emitted into the atmosphere at a future date. For this reason, tCERs and ICERs are valid only for a specific period of time. Any Party holding one of these units is required to replace the tCER or ICER with another unit prior to the expiry date.

The rules for expiry differ for tCERs and ICERs, but always involve a transfer of units to a replacement account. It is not the expiring tCER or ICER itself which is transferred to the replacement account; instead, a different unit is selected and transferred for this purpose. For example, an expiring tCER may be replaced by transferring an AAU to the appropriate replacement account.

##### TEMPORARY CERTIFIED EMISSION REDUCTIONS

Decision 5/CMP.1,  
annex, paragraphs 42–44

tCERs expire at the end of the commitment period subsequent to the commitment period for which they were issued. For example, a tCER that is issued on the basis of a removal of emissions for the first commitment period will expire at the end of the second commitment period. A tCER can be transferred and retired only in the commitment period in which it was issued.<sup>13</sup>

Any tCER that has been retired or used to replace another expired tCER must be replaced before it expires. The Party holding the tCER must transfer an AAU, ERU, CER, RMU or tCER to the tCER replacement account.

#### LONG-TERM CERTIFIED EMISSION REDUCTIONS

Decision 5/CMP.1,  
annex, paragraphs 23 and 46

The date at which a ICER expires is determined by the project crediting period chosen by the project participants. The participants have two options for the project crediting period: a maximum of 20 years, which can be renewed twice, or a maximum of 30 years with no renewal. ICERs expire at the end of the crediting period or, where a renewable crediting period is chosen, at the end of the last crediting period of the project activity.

Decision 5/CMP.1,  
annex, paragraph 45

Any ICER that has been transferred to a Party's retirement account must be replaced before its expiry date. For this purpose, the Party concerned must transfer one AAU, CER, ERU or RMU to the ICER replacement account for the current commitment period.

DES, section 6.2.3  
Decision 5/CMP.1,  
annex, paragraphs 44, 48 and 55

The ITL will track the expiry and replacement of each tCER and ICER. When a tCER in a retirement or replacement account or a ICER in a retirement account is due to expire, the ITL will notify the registry holding the unit 30 days prior to that date. The registry must transfer the appropriate quantity and type of units to the relevant replacement account within 30 days. The replacement transaction proposal must reference the notification ID received from the ITL.

#### 7.4.2. REVERSAL OF STORAGE

Decision 5/CMP.1,  
annex, paragraph 49

Because afforestation and reforestation projects under the CDM last for long periods, a certification report must be submitted every five years to report on the emission removals that have occurred. If the project generates ICERs and a certification report indicates that the GHG removals achieved by a project have been reversed since the last certification (reversal of storage), replacement of the affected ICERs is required. In the case of projects generating tCERs, no such replacement is required, as tCERs expire much earlier than ICERs.

<sup>13</sup> If the project participants in the CDM project can demonstrate that the emissions removed through the project have not been emitted back into the atmosphere, they will be issued new tCERs with expiry dates set to the end of the next commitment period.

Decision 5/CMP.1,  
annex, paragraph 49

DES, section 6.2.4

Each national registry must maintain a separate account for replacement of ICERs in case emissions removed and stored through a CDM LULUCF project are re-emitted back into the atmosphere. If the CDM Executive Board determines that such a reversal of storage has occurred, it will request the ITL administrator to identify the quantity of ICERs from the project that are remaining in holding and retirement accounts. The ITL will calculate the share of the replacement to be undertaken by each affected registry, based on its proportion of holdings of the remaining ICERs from the project, and send a reversal of storage notification to each such registry. ICERs in holding accounts will be invalid for transfer to holding or retirement accounts until the Party has replaced the appropriate quantity of units.

When a national registry receives a reversal of storage notification from the ITL, the registry must transfer a quantity of units equivalent to the total quantity of affected ICERs from its holding accounts and retirement account to its replacement account for reversal of storage. For a given reversal of storage notification, only AAUs, ERUs, RMUs, CERs and ICERs from the same project activity may be transferred to the replacement account for reversal of storage. Each replacement for a reversal of storage transaction should contain a reference to the notification ID to enable the ITL to track the replacement against the reversal of storage. Once the registry has replaced the requisite quantity of units, the ICERs affected will again be valid for transfer.

#### 7.4.3. NON-CERTIFICATION

If the CDM Executive Board determines that a certification report for a ICER-generating project has not been submitted within the required five-year period, replacement of all remaining ICERs from that project is required. This can be taken as an indication that the active control over the project has ceased and there is no longer a guarantee that the carbon stored through the project remains in the forest.

Decision 5/CMP.1,  
annex, paragraph 50

DES, section 6.2.5

Each national registry must maintain a separate account for replacement of ICERs upon non-submission of the CDM certification report. If the CDM Executive Board determines that a required certification report has not been submitted, it will request the ITL administrator to identify the quantity of ICERs from the project remaining in holding and retirement accounts. The ITL will send a non-submission notification to each registry that has affected ICERs informing them of the need to replace these units. All affected ICERs in holding accounts will be permanently invalid for transfer to holding and retirement accounts.

In the event of the registry receiving such a notification from the ITL, the registry must transfer the equivalent number of units to the replacement account for non-submission of certification and include a reference to the notification ID. For a given non-certification notification, only AAUs, ERUs, RMUs, CERs and ICERs from the same project activity may be transferred to the replacement account for non-certification. The registry must reference the notification ID with each transaction.

## 7.5. RETIREMENT

Decision 13/CMP.1,  
annex, paragraphs 13, 14 and 34  
DES, section 4.1.6

Retirement refers to the internal transfer of units from a holding account in a national registry to the retirement account. The assessment of compliance with a Party's Article 3, paragraph 1, commitment will be made by comparing the total quantity of units in its retirement account to its total Annex A emissions for the commitment period. Therefore, by the end of the true-up period, each Party must ensure that it has transferred to its retirement account a quantity of units equal to its total Annex A emissions for the commitment period.

AAUs, ERUs and RMUs can be retired without limitation. However, restrictions apply to the retirement of CERs, tCERs and ICERs:

Decision 3/CMP.1,  
annex, paragraph 33

- Unlike the other Kyoto mechanisms, the eligibility criteria for participation in the CDM apply to the retirement of CERs rather than their transfer and acquisition. Therefore the ITL will approve retirement of CERs, tCERs and ICERs only when the Party concerned meets all the eligibility criteria for participation in the Kyoto mechanisms. For a Party that meets these eligibility criteria, there is no limit to the quantity of CERs that may be retired;
- tCERs and ICERs may be retired only up to a quantity equal to 1 per cent of base year emissions for a Party, times five.

Decision 5/CMP.1,  
annex, paragraph 51

Decision 16/CMP.1,  
annex, paragraph 14

## 7.6. CARRY-OVER

Decision 13/CMP.1,  
annex, paragraph 36

DES, section 4.1.7

Carry-over refers to the process by which a unit that was issued and valid for one commitment period becomes valid for transactions during the subsequent commitment period. Carry-over cannot be performed for a Party until after its compliance assessment has been completed.

For a carry-over transaction to occur, a Party must have discharged all mandatory transactions for the previous commitment period:

- The Party must have retired sufficient units to cover its total Annex A emissions, and must not have been found to be in non-compliance with its Article 3, paragraph 1, commitment;
- The Party must have replaced all tCERs and ICERs that expired during the previous commitment period, and all ICERs that were subject to replacement for reversal of storage or non-certification in that commitment period;
- The Party must have undertaken any transactions necessary to reflect a correction applied by the enforcement branch of the Compliance Committee, including any outstanding retirement.

Decision 13/CMP.1,  
annex, paragraphs 15, 16 and 49

The type and quantity of units for which carry-over is requested must comply with the rules and limitations for carry-over:

- AAUs can be carried over without limitation;
- CERs and ERUs, respectively, from emission reduction projects may each be carried over up to a quantity equal to 2.5 per cent of the Party's initial assigned amount;
- Any units issued on the basis of a LULUCF activity, specifically RMUs, tCERs, ICERs and ERUs generated by JI LULUCF projects (and hence converted from RMUs), may not be carried over.

Decision 22/CMP.1,  
annex, paragraph 90

The quantities requested by a Party for carry-over will be reviewed by the ERT to ensure that the Party has undertaken all necessary mandatory transactions and that the unit types and quantities requested are consistent with the carry-over rules. Following the review and compliance procedures for the true-up period, the total quantity of units available and eligible for carry-over for each Party will be recorded in the CAD and provided to the ITL.

DES, section 6.2.8

Upon receipt of these data, the ITL will send a notification to each registry, indicating the total number of units that the registry may carry over. The registry must then initiate carry-over transactions, subject to the carry-over limitations referred to above and up to the total number given in the notification. All such carry-over transactions must reference the notification ID. The units will remain in the same account and the serial numbers will remain unchanged, except that the applicable commitment period identifier will be updated to the subsequent commitment period. The DES state that such transactions must be completed within 30 days from the date of the notification.<sup>14</sup> Any units remaining in holding accounts (i.e. those that are not carried over) must be transferred to the mandatory cancellation account.



## 7.7. CHANGE OF EXPIRY DATE

DES, section 4.1.8

Expiry dates of tCERs and lCERs need to be changed in the following situations:

- (a) tCER expiry dates need to be changed if the end date of the second commitment period is defined as a date other than that used, for technical reasons, during issuance;<sup>14</sup>
- (b) lCER expiry dates need to be changed when the crediting period of a CDM afforestation and reforestation project activity is renewed.

In either of these situations, the ITL will send a notification to the registry to inform it of the new expiry date and the tCERs or lCERs for which the expiry dates are to be changed. The registry must initiate a change of expiry date transaction for these units within 30 days, referencing the notification ID received from the ITL.

<sup>14</sup> This time frame is set for technical purposes to facilitate the tracking of carry-over transactions.

<sup>15</sup> In the absence of an end date for the second commitment period, it has been assumed, for technical reasons only, that tCERs will expire on 31 December 2017.

## VIII. LAND USE, LAND-USE CHANGE AND FORESTRY

The treatment of LULUCF in the Kyoto Protocol was the subject of lengthy and contentious negotiations. As a result of the concerns of some Parties regarding the uncertainties and technical difficulties of estimating emissions and removals from LULUCF, this sector is treated differently from Annex A sectors. The Kyoto Protocol limits the accounting of emissions and removals from LULUCF by Annex I Parties to those activities defined under Article 3, paragraphs 3 and 4.

### 8.1. ARTICLE 3, PARAGRAPHS 3 AND 4, ACTIVITIES

Article 3,  
paragraph 3

Decision 16/CMP.1,  
annex, paragraph 1

Article 3, paragraphs 3 and 4, activities are defined on the basis of land use. Article 3, paragraph 3, activities encompass land which has been subject to direct, human-induced conversion from a forested to a non-forested state, or vice versa. The land conversion must have occurred after 31 December 1989, and must be consistent with the Party's parameters for the definition of a forest, as reported in its initial report. Article 3, paragraph 3, activities are as follows.

LULUCF GPG, section 4.2.5.1

- *Afforestation and reforestation* (AR) activities refer to the conversion of non-forested land to a forested state. Afforestation means the human-induced conversion to forest of land that has been non-forested for at least 50 years at the time of conversion; reforestation refers to the conversion to forest of land that has been non-forested for a shorter period of time. Since the methodologies for estimating emissions and removals from afforestation and reforestation are identical, the two activities are treated as one for reporting and accounting purposes under the Kyoto Protocol;

LULUCF GPG, section 4.2.6.1

- *Deforestation* (D) refers to the conversion of forested land to a non-forested state. (Article 3, paragraph 3, does not cover harvest and replanting of forested land, as these are considered forest management and are therefore covered under Article 3, paragraph 4.)

Conversely, Article 3, paragraph 4, activities encompass lands that have not undergone conversion since 1990, but are otherwise subject to a specific land use. These activities are as follows.

LULUCF GPG, section 4.2.7.1

- *Forest management* (FM) refers to a system of practices for stewardship and use of forest land. Land classified under forest management may contain both natural forests and plantations, but must meet the definition of forest as determined by the Party's selected forest parameters;

LULUCF GPG, section 4.2.8.1

- *Cropland management* (CM) refers to the system of practices on land on which agricultural crops are grown, and on land that is set aside or temporarily not being used for crop production;

LULUCF GPG, section 4.2.9.1

- *Grazing land management* (GM) refers to the system of practices of land used for livestock production aimed at manipulating the amount and type of vegetation and livestock produced;

LULUCF GPG, section 4.2.10.1

- *Revegetation* (RV) is defined as a direct, human-induced activity to increase carbon stocks on sites through the establishment of vegetation that covers a minimum area of 0.05 hectares and does not meet the definitions of afforestation and reforestation.

LULUCF GPG, section 4.1.2

Because accounting of Article 3, paragraph 3, activities is mandatory, the classification of a land area as AR or D takes precedence over classification as an Article 3, paragraph 4, activity. Once a land area is classified as AR or D, it cannot be later classified as an Article 3, paragraph 4, activity, regardless of any land management practices that occur on that land. Thus, while it is possible, for example, that AR land is later subject to FM, or that D land is later subject to CM, the land must remain classified under Article 3, paragraph 3, for the entire commitment period. However, a land area can change classification from AR to D if land that was afforested or reforested after 1989 is later deforested prior to the end of the commitment period. The classification of a land area as D is permanent for the commitment period.

Decision 16/CMP.1,  
annex, paragraph 19

Parties must ensure that a land area is only classified as one particular land use at any point in time, so that double counting of the emissions and removals from that land does not occur. Once a land area is classified and accounted for under the Kyoto Protocol, it must continue to be accounted for throughout the remainder of the commitment period and subsequent commitment periods.

## 8.2. ACCOUNTING APPROACH

Decision 13/CMP.1,  
annex, paragraph 8 (c) and (d)

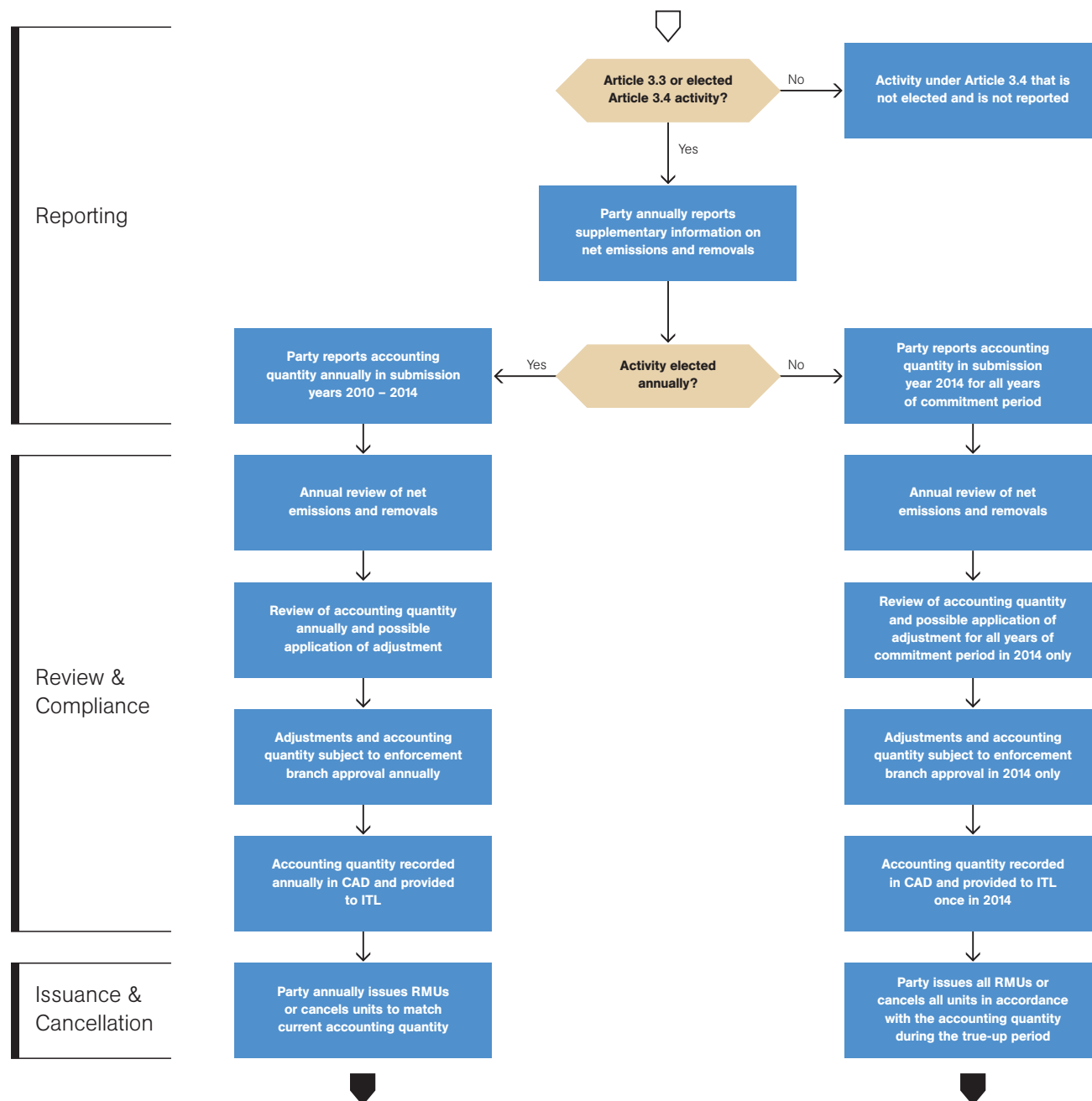
Each Party must indicate which, if any, of the activities under Article 3, paragraph 4, it wishes to account for in its initial report. In addition, the Party must choose the accounting frequency for each Article 3, paragraph 3, activity and each elected Article 3, paragraph 4, activity. It must account for net emissions and removals for each activity during the commitment period by issuing RMUs or cancelling Kyoto units based on the corresponding removals and emissions, and according to the specific rules for that activity and the accounting frequency chosen in its initial report.

If a Party chooses annual accounting for an activity, then it issues or cancels units for that activity on an annual basis following the review and compliance procedures for the inventory for the first year of the commitment period (in the case of the first commitment period this inventory will be submitted in 2010). Conversely, for activities for which a Party has chosen commitment period accounting, the Party issues or cancels units for the entire commitment period following the review and compliance procedures for the inventory for the last year of the commitment period, which will be submitted in 2014.

Decision 13/CMP.1,  
annex, paragraphs 25 and 32

For both annually accounted activities and commitment period accounted activities, a Party may not issue or cancel units until its reported net emissions and removals and its calculation of the quantity of units to be added to or subtracted from its assigned amount for that activity (the 'accounting quantity') have been subject to review and compliance procedures. Following the review and compliance procedures, the accounting quantity will be recorded in the CAD and provided to the ITL. The Party can then issue or cancel units to account for the activity. These stages are shown in [FIGURE VII-7](#) and are described in more detail below.

Figure VIII-7. Overview of accounting for Article 3, paragraphs 3 and 4, activities



#### ACCOUNTING QUANTITY

Decision 16/CMP.1,  
annex, paragraph 17

The accounting quantity for an activity represents the cumulative addition to or subtraction from a Party's assigned amount for a given year of the commitment period. A negative accounting quantity corresponds to net removals and indicates that the Party has a cumulative obligation to add to its assigned amount by issuing an equivalent quantity of RMUs for that activity. A positive accounting quantity corresponds to net emissions, and indicates that the Party must subtract from its assigned amount by cancelling<sup>16</sup> the corresponding quantity of units.

For an activity for which the Party has chosen commitment period accounting, the Party will calculate and report the accounting quantity only once, in its 2014 submission. This accounting quantity will capture all emissions and removals from the activity for all five years of the commitment period.

For an activity that is accounted annually, the accounting quantity must be calculated and reported annually based on the net emissions and removals for all years of the commitment period that have been reported in that submission. Thus, in the submission for year 2010, the accounting quantity will be based on emissions and removals for the year 2008 only. In the year 2011 submission, the accounting quantity will be based on emissions and removals for the years 2008 and 2009. Because the accounting quantity is calculated on cumulative emissions and removals, using most recent inventory data, any recalculations of emissions and removals for previous years will be incorporated automatically into the accounting quantity for the currently reported year.

##### 8.2.1. ISSUANCE AND CANCELLATION OF UNITS

Decision 13/CMP.1,  
annex, paragraphs 25, 26, 32  
and 42

DES, section 6.2.1  
and appendix E

Following the completion of the review and compliance procedures, the Party's accounting quantity for an activity will be recorded in the CAD and provided to the ITL. Once the ITL has the accounting quantity, the Party must then issue or cancel units for the activity.

For the first accounting year (or for commitment period accounted activities) the quantity of units to be issued or cancelled will equal the accounting quantity. However, for subsequent years, the exact quantity of units that a Party must issue or cancel must be calculated by the registry based on the accounting quantity and the number of units previously issued or cancelled for that activity. Specifically, the quantity of units to be issued or cancelled will equal the accounting quantity, plus the quantity of RMUs already issued for that activity, minus the quantity of units cancelled for

net source cancellation for that activity. Where the result is negative, the Party must issue the equivalent number of RMUs. Where the result is positive, the Party must cancel the equivalent quantity.

The relationship between the accounting quantity and units previously issued or cancelled can be seen in [TABLE VIII-3](#), which shows a hypothetical example of annual accounting for an activity over the five years of the first commitment period. After the submission for the first year of the commitment period (2008), the accounting quantity equals –15. The Party must therefore issue 15 RMUs. After the following year, the accounting quantity equals –30. However, the Party may issue only 15 RMUs, because it has already issued 15 the previous year. The same occurs in the next two years. In the submission for the fifth year, the Party recalculates its net emissions and removals for all previous years, which results in a lower estimate of net removals from the activity. Although the accounting quantity is still negative, the Party must now cancel 10 Kyoto units because it has already issued more RMUs than the new accounting quantity. After cancellation of 10 units, the Party's net issuance over the commitment period (60 issued minus 10 cancelled) is equal to the final accounting quantity.

<sup>16</sup> In the context of accounting for Article 3, paragraphs 3 and 4, activities, cancellation means net source cancellation, as described in [CHAPTER VII.3.1](#)

**Table VIII-3. Determination of the quantity of units to be issued or cancelled**

Submission Year	Inventory Year	Net Emissions & Removals	Accounting Quantity	Action
2010	2008	-15	-15	Issue 15 RMUs
2011	2008	-15	-30	Issue 15 RMUs
	2009	-15		
2012	2008	-15	-45	Issue 15 RMUs
	2009	-15		
	2010	-15		
2013	2008	-15	-60	Issue 15 RMUs
	2009	-15		
	2010	-15		
	2011	-15		
2014	2008	-10	-50	Cancel 10 units
	2009	-10		
	2010	-10		
	2011	-10		
	2012	-10		

### 8.3. ACCOUNTING RULES

Each activity under Article 3, paragraphs 3 and 4, is subject to different accounting rules. This section provides an overview of these accounting rules, and the calculation of the corresponding accounting quantities for each activity. FIGURES VIII-8 and VIII-9 give quantitative examples.

#### 8.3.1. AFFORESTATION AND REFORESTATION

Decision 16/CMP.1,  
annex, paragraph 4

AR is subject to a specific accounting rule: ‘debits resulting from harvesting during the first commitment period following afforestation and reforestation since 1990 shall not be greater than credits accounted for on that unit of land’.<sup>17</sup> In other words, whenever emissions are larger than removals in a given unit of land, a net balance of zero should be assumed for that unit of land.

This rule has two implications for the calculation of the accounting quantity for AR. First, it requires that the accounting quantities be calculated separately for harvested land and non-harvested land, because the rule only applies to harvested land. Second, for harvested land, the accounting quantity must be calculated based on emissions and removals from each individual ‘unit of land’ rather than aggregated GHG emissions and removals from all units of harvested land.

Each Party should calculate the accounting quantity for AR according to the following steps. If the Party has chosen annual accounting for AR, it should calculate the accounting quantity every year and include the calculation in its annual report. If it has chosen commitment period accounting, it should calculate the accounting quantity and report it only once in the annual report which contains the inventory for the last year of the commitment period (to be submitted in 2014 in the case of the first commitment period).

These steps are explained below and shown diagrammatically in FIGURE VIII-8. A Party should:

1. Calculate the cumulative net emissions or removals to date on all areas of non-harvested lands in t CO<sub>2</sub> eq;<sup>18</sup>
2. Set the accounting quantity for non-harvested lands equal to the total net emissions and removals calculated in step 1;
3. Calculate the total net emissions or removals to date for each individual area of harvested land in t CO<sub>2</sub> eq;

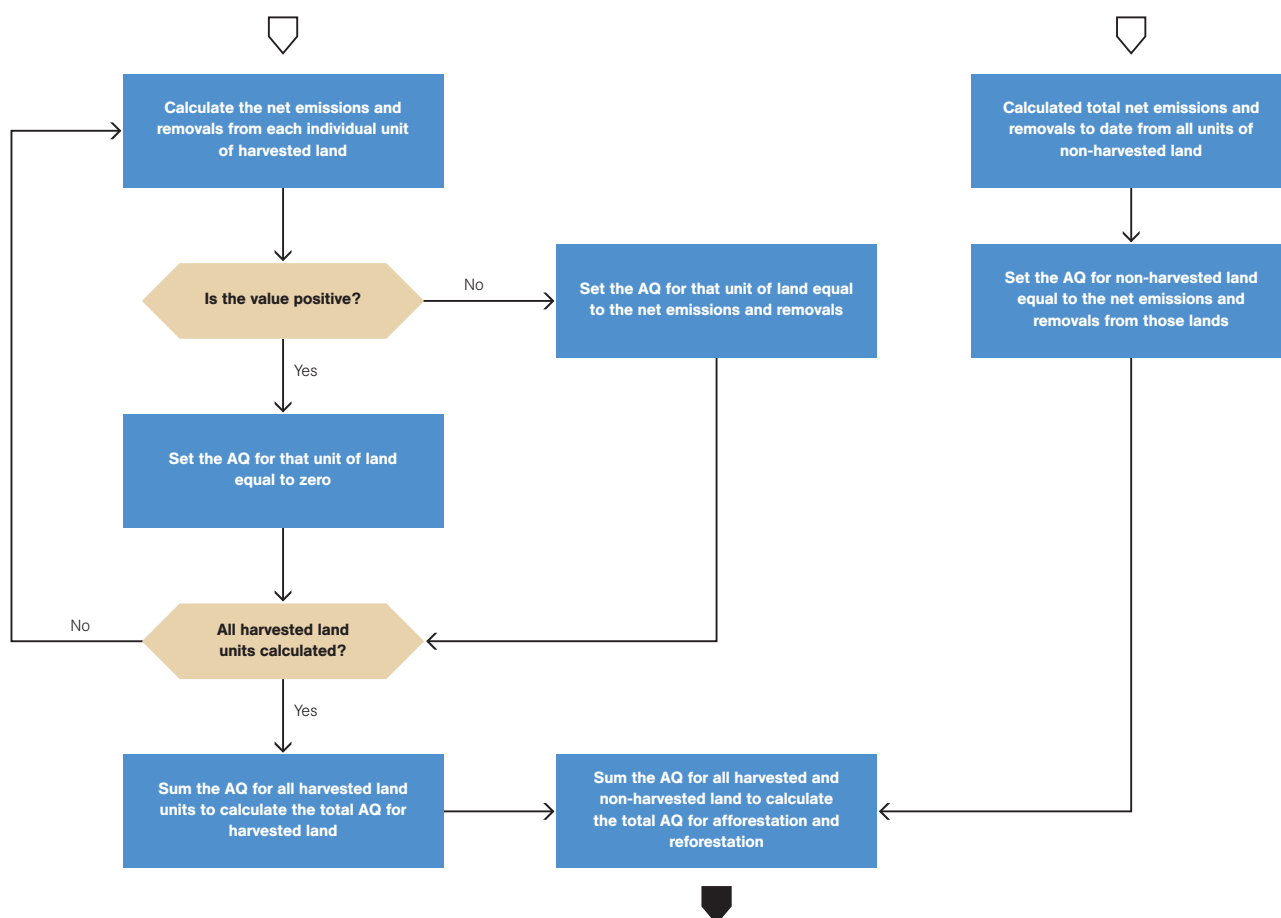


4. Calculate the accounting quantity for each individual area of harvested land. If a land area yields total net emissions, then the accounting quantity for that area of land equals zero; otherwise set the accounting quantity equal to the total net removals to date calculated in step 3 above;
5. Calculate the accounting quantity for all harvested lands collectively by summing the accounting quantities for each individual area of land; and, finally,
6. Sum the accounting quantities for non-harvested land (step 2) and harvested land (step 5) to calculate the accounting quantity for AR.

<sup>17</sup> It should be noted that, while the provision refers to 'units of land', the CRF is reported according to geographical location. Therefore, this provision should be implemented at the level of detail provided by the Party in the CRF (i.e. at geographical locations).

<sup>18</sup> All Kyoto Protocol units are denominated in t CO<sub>2</sub> eq. The accounting quantity must therefore be calculated in terms of t CO<sub>2</sub> eq.

Figure VIII-8. Calculation of the accounting quantity for afforestation and reforestation



### 8.3.2. DEFORESTATION

Decision 16/CMP.1

For D, the calculation of the accounting quantity is more straightforward:

1. The Party should first calculate the cumulative net emissions or removals for all deforested land areas for all years of the commitment period to date;
2. The accounting quantity for D is equal to the cumulative net emissions or removals for D to date for the commitment period.

Note that it is possible for removals to occur on deforested land and thus for a Party to issue RMUs for this activity. This is because classification of land under D is permanent for the commitment period, regardless of the activities that subsequently occur on that land.

### 8.3.3. FOREST MANAGEMENT

Two specific accounting rules apply to FM; offset and 'forest management cap' (FM cap).

Decision 16/CMP.1,  
annex, paragraph 10

- If, in the first commitment period, a Party incurs a net source of emissions under the provisions of Article 3, paragraph 3, it may account for emissions and removals in areas under FM under Article 3, paragraph 4. The quantity of RMUs that the Party may issue to offset these activities is equal to the net cancellation for emissions under these activities, up to a limit of 165 Mt CO<sub>2</sub> eq for the commitment period (9.0 Mt of carbon multiplied by five, converted to CO<sub>2</sub> eq). This will apply to Parties for which total emissions and removals in the managed forest since 1990 are equal to, or larger than, the net source of emissions incurred under Article 3, paragraph 3. Parties will have to indicate this in their annual inventory submissions;
- Each Party is subject to a FM cap equal to the limit established for that Party in the annex to decision 16/CMP.1<sup>19</sup> converted to Mt CO<sub>2</sub> eq and multiplied by five. The FM cap applies to both additions to and subtractions from its assigned amount; thus, both the quantity of RMUs that the Party may issue due to net removals and the quantity of units that the Party must cancel for net emissions are limited by the cap.

Decision 16/CMP.1,  
annex, paragraph 11

Decision 8/CMP.2

To calculate the accounting quantity for FM, a Party must first calculate the accounting quantity up to the level of its offset, and then calculate any accounting quantity for the FM cap. It should be noted that the calculation of the accounting quantity for the offset represents the allowable offset after accounting for AR and D. The ITL will approve the issuance

of additional RMUs under FM for the offset only up to the level of the Party's actual net cancellation for Article 3, paragraph 3, activities. Thus it is important that the Party's registry undertake any necessary issuance and cancellation for AR and D before attempting to issue additional RMUs for this offset from FM.

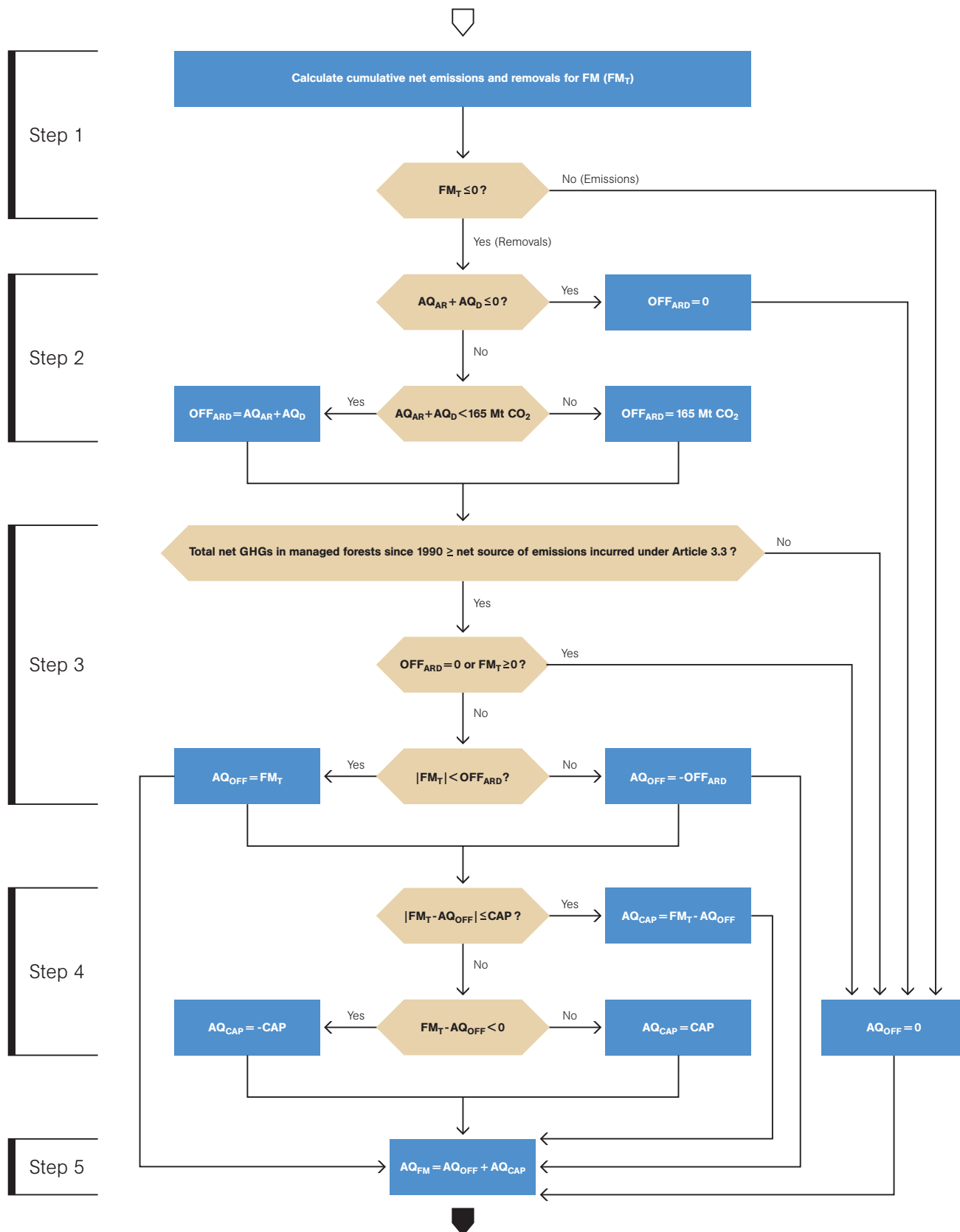
These steps for calculation of the accounting quantity for FM by the Party are described below and shown in diagrammatic form in [FIGURE VIII-9](#):

1. Calculate the cumulative net emissions or removals from FM management in t CO<sub>2</sub> eq (FMT in [FIGURE VIII-9](#));
2. Determine the allowable offset for cancellation due to emissions under Article 3, paragraph 3 (OFF<sub>ARD</sub>), by summing the accounting quantity for afforestation and reforestation (AQAR) and the accounting quantity for deforestation (AQD) (it should be noted that, if the Party is accounting for AR and D over the commitment period instead of annually, the accounting quantities for AR and D will be zero until the submission for the final year of the commitment period):
  - (a) If the sum of the accounting quantities is less than or equal to zero, then the Party does not qualify for an offset in the current year. OFF<sub>ARD</sub> equals zero;
  - (b) If the sum is greater than zero, but less than 165 Mt CO<sub>2</sub> eq, then OFF<sub>ARD</sub> is equal to the sum. Otherwise, OFF<sub>ARD</sub> is equal to 165 Mt CO<sub>2</sub> eq.
3. Calculate the accounting quantity for FM to compensate for the cancellation of units under Article 3, paragraph 3 (AQ<sub>OFF</sub>). This only applies if the value of total anthropogenic GHG emissions by sources and removals by sinks in the managed forest since 1990<sup>20</sup> is equal to, or greater than, the net source of emissions incurred under Article 3, paragraph 3:
  - (a) For FM net emissions, AQ<sub>OFF</sub> equals zero;
  - (b) If the absolute value of FM net removals is less than OFF<sub>ARD</sub>, then AQ<sub>OFF</sub> is equal to the net removals. Otherwise, AQ<sub>OFF</sub> is equal to the negative value of OFF<sub>ARD</sub>.
4. Calculate the accounting quantity up to the limit of the Party's FM cap (AQ<sub>CAP</sub>): If the absolute value of the FM minus AQ<sub>OFF</sub> is less than, or equal to the FM cap, then AQ<sub>CAP</sub> equals FM minus AQ<sub>OFF</sub>. If FM minus AQ<sub>OFF</sub> is less than zero, then AQ<sub>CAP</sub> equals the negative value of the FM cap. Otherwise, AQ<sub>CAP</sub> equals the FM cap.
5. Calculate the total accounting quantity for FM (AQ<sub>FM</sub>). This is equal to the sum of AQ<sub>CAP</sub> and AQ<sub>OFF</sub>.

<sup>19</sup> The FM cap for Italy was modified by decision 8/CMP.2.

<sup>20</sup> Without prejudice to paragraph 10 of the annex to decision 16/CMP.1 this test is valid only when using the absolute value of the total anthropogenic GHG emissions by sources and removals by sinks.

Figure VIII-9. Calculation of the accounting quantity for forest management



Decision 16/CMP.1,  
annex, paragraph 9

#### 8.3.4. CROPLAND MANAGEMENT, GRAZING LAND MANAGEMENT, REVEGETATION

The remaining activities under Article 3, paragraph 4, are subject to a net-net accounting rule. This means that the accounting quantity is equal to the net emissions or removals from the activity over the commitment period minus five times the net emissions and removals from the activity in the Party's base year. When a Party recalculates its emissions and removals for the base year, its accounting quantity will also change accordingly.

The accounting quantity for CM, GM or RV is calculated in three steps, as follows:

1. Calculate the cumulative net emissions and removals for the activity for all years of the commitment period to date;
2. Calculate the net emissions and removals for the activity in its base year;
3. Calculate the accounting quantity for that activity. To do this, the Party must multiply the net emissions and removals in its base year by the number of years of the commitment period for which it is reporting, and subtract this value from the cumulative emissions and removals for the activity. For example, in its 2012 submission a Party is reporting on inventory year 2010, which is year three of the commitment period. Therefore the Party must subtract three times the net emissions or removals from that activity in the base year from the cumulative net emissions or removals from that activity in the years 2008 – 2010.

#### 8.4. REPORTING

Parties must provide information related to their accounting of activities under Article 3, paragraphs 3 and 4, in their initial report and their annual reports.

#### 8.4.1. THE INITIAL REPORT

##### FOREST PARAMETERS

Decision 16/CMP.1,  
annex, paragraph 16

Each Party is required to include information in its initial report on specific parameters related to the definition of a forest under the Kyoto Protocol. These parameters will be used by future ERTs to verify that the Party has correctly and consistently estimated its emissions and removals for LULUCF activities under Article 3, paragraphs 3 and 4. These parameters are:

- A value for minimum tree crown cover, which must be between 10 and 30 per cent;
- A value for minimum land area, which must be between 0.05 and 1 ha; and
- A value for minimum tree height, which must be between 2 and 5 m.

The Party should also explain how these parameters are consistent with the values that it has previously reported to the Food and Agriculture Organization of the United Nations (FAO). If these values differ from those reported to the FAO, the Party should explain why the values were chosen.

##### ACTIVITIES ELECTED UNDER ARTICLE 3, PARAGRAPH 4

Decision 16/CMP.1,  
annex, paragraphs 6 and 7

Each Party must also indicate the activities it has elected under Article 3, paragraph 4 – FM, CM and RV – in its initial report. Each Party can choose to account for any, all or none of the activities according to its national circumstances. However, each Party must indicate its decision to account for Article 3, paragraph 4, activities in its initial report. Any Article 3, paragraph 4, activity elected by the Party in its initial report becomes mandatory for that Party for the first commitment period.

##### ACCOUNTING FREQUENCY

Decision 13/CMP.1,  
annex, paragraphs 25 and 32

The final item of information required in the initial report is the frequency of accounting chosen by the Party. For each activity under Article 3, paragraph 3, and each activity elected under Article 3, paragraph 4, a Party may choose either to account annually during the commitment period or to account only once at the end of the commitment period. This choice determines when it may issue RMUs or be required to cancel other units. If a Party chooses to account annually for an activity, it must issue and cancel units each year, following the review of its emissions and removals for that activity. Conversely,

if it chooses commitment period accounting, it may not issue RMUs or cancel other units for emissions and removals for that activity until after the review of the inventory for the final year of the commitment period.

A Party is not required to choose the same accounting frequency for each activity; it may choose to account for some activities annually and others only at the end of the commitment period.

#### 8.4.2. ANNUAL REPORTS

Decision 15/CMP.1,  
annex, paragraphs 5–9

Parties must report two types of supplementary information related to activities under Article 3, paragraphs 3 and 4, in their annual reports. The first type is GHG inventory information, that is, emissions and removals from these activities, and related methodological information. The second is the calculation of the accounting quantity for each activity.

#### GREENHOUSE GAS INVENTORY INFORMATION

Decision 15/CMP.1,  
paragraph 2,  
and annex, paragraphs 5–9

Beginning in 2010, each Party must begin reporting supplementary information on its emissions and removals from activities under Article 3, paragraphs 3 and 4, in its annual report. Each Party must report emissions and removals annually for each activity under Article 3, paragraph 3, and each elected activity under Article 3, paragraph 4, regardless of whether it has chosen to account for the activity on an annual or a commitment period basis.

Decision 17/CMP.1,  
paragraphs 1 and 2  
Decision 6/CMP.3

Emissions and removals data must be estimated using methods that are consistent with the IPCC good practice guidance for LULUCF and reported in the CRF tables according to agreed guidelines. Special CRF tables have been developed for reporting emissions and removals from Article 3, paragraphs 3 and 4, activities. These tables must be submitted along with the complete set of LULUCF tables required under the Convention.

The Party must report the full set of CRF tables for activities under Article 3, paragraphs 3 and 4, for each year of the commitment period. For CM, GM and RV, the Party must also report the relevant parts of the CRF table for the base year to enable calculation of the net-net accounting quantity. Although it is not mandatory, Parties are encouraged to report the full time series of CRF tables (i.e. 1990 through the relevant commitment period year) for Article 3, paragraphs 3 and 4, activities to promote transparency, and to facilitate the review of these activities. In addition, it must submit a full set of CRF tables for all years for LULUCF as required under the Convention.

The IPCC good practice guidance for LULUCF includes specific guidance on estimating emissions and removals for activities under Article 3, paragraphs 3 and 4. Parties should ensure that the IPCC good practice guidance for LULUCF is applied in the development of these inventories.

#### ACCOUNTING QUANTITY

Each Party must calculate and report the accounting quantity for an activity with the same frequency it has chosen to account for that activity. If a Party has chosen to account for an activity annually it must calculate and report the accounting quantity for that activity every year beginning in 2010. If it has elected commitment period accounting for an activity, it must calculate and report the accounting quantity for that activity only once, in the annual report submitted for the inventory for the last year of the commitment period (in 2014).

The specific format for reporting the accounting quantity was agreed upon on at the third session of the CMP.<sup>21</sup> It is provided in appendix II. The formulae used to calculate the accounting quantities, as agreed by the SBSTA at its twenty-eighth session, are also included in appendix II.

#### 8.5. REVIEW AND COMPLIANCE

Decision 22/CMP.1,  
annex, paragraph 15 (b)

Decision 20/CMP.1,  
annex, paragraph 13

Each year, the reported emissions and removals for each Article 3, paragraph 3, activity and each elected Article 3, paragraph 4, activity will be subject to review by an ERT. As with emissions from Annex A sources, the ERT may recommend an adjustment to the net emissions and removals for an activity. However, the ERT may recommend adjustments to emissions and removals for an activity only when the Party is accounting for that activity. Thus, if a Party has chosen commitment period accounting for FM, an ERT will review the Party's reported emissions and removals annually but will not recommend an adjustment until the annual review for the last year of the commitment period, at which time the Party will also report its calculation of the accounting quantity for FM.

Decision 18/CMP.1,  
paragraph 1 and annex

For activities that are accounted in a particular submission year, the ERT will also review the Party's calculation of the accounting quantity. When an adjustment is applied, either by the Party concerned or by the Compliance Committee, the calculation of the accounting quantity for that activity will also be modified to reflect the adjusted emissions and removals.



Decision 13/CMP.1,  
annex, paragraph 26

Decision 18/CMP.1,  
paragraph 1

If the magnitude of adjustments applied to a Party's reported net removals for an activity in a particular year exceeds a threshold of 9 per cent, the Party will not be allowed to issue any RMUs for that activity for that year. For this determination, the magnitude of the adjustments is calculated as the absolute value of the adjusted net estimate for the activity minus the submitted net estimate for the activity, divided by the sum of the absolute values of all submitted components for the activity, multiplied by 0.18.

## 8.6. ARTICLE 6 PROJECTS

Decision 9/CMP.1,  
paragraph 4

LULUCF projects under Article 6 must conform to the definitions and rules as activities under Articles 3, paragraphs 3 and 4, of the Kyoto Protocol. Thus, eligible activities under Article 6 are AR, FM, CM, and RV, and these are subject to the same limits over the commitment period.

In order to issue an ERU from a LULUCF project under Article 6, a Party must convert an existing RMU. Thus, a Party that wishes to generate ERUs from LULUCF projects during the commitment period should ensure that it chooses to account for at least one activity, for which it expects net removals, on an annual basis. If the Party has chosen to account for all Article 3, paragraphs 3 and 4, activities on a commitment period basis, the Party will not be able to issue RMUs, and thus will not be able to issue ERUs from LULUCF projects, until the true-up period.

Because emissions and removals from Article 3, paragraphs 3 and 4, activities and the corresponding calculation of the accounting quantities will be reviewed by an ERT for conformity with the LULUCF accounting rules before the Party is allowed to issue RMUs, any ERUs converted from those RMUs will also be in conformity with those rules. In addition, because a LULUCF project does not create a new unit, but instead converts a RMU, there is no possibility of double counting or double crediting of the removals from the project.

<sup>21</sup> Decision 6/CMP.3.

# APPENDICES

## I. ANNEX A EMISSIONS AND SOURCES

**Table 1** Greenhouse gases

Carbon dioxide	CO <sub>2</sub>
Methane	CH <sub>4</sub>
Nitrous oxide	N <sub>2</sub> O
Hydrofluorocarbons	HFCs
Perfluorocarbons	PFCs
Sulphur hexafluoride	SF <sub>6</sub>

**Table 2** Sectors/source categories

Energy	Fuel combustion <ul style="list-style-type: none"> <li>• Energy industries</li> <li>• Manufacturing industries and construction</li> <li>• Transport</li> <li>• Other sectors</li> <li>• Other</li> </ul>
	Fugitive emissions from fuels <ul style="list-style-type: none"> <li>• Solid fuels</li> <li>• Oil and natural gas</li> <li>• Other</li> </ul>
Industrial processes	Mineral products
	Chemical industry
	Metal production
	Other production
	Production of halocarbons and sulphur hexafluoride
	Consumption of halocarbons and sulphur hexafluoride
Solvent and other product use	Other
Agriculture	Enteric fermentation
	Manure management
	Rice cultivation
	Agricultural soils
	Prescribed burning of savannas
	Field burning of agricultural residues
	Other
Waste	Solid waste disposal on land
	Wastewater handling
	Waste incineration
	Other

## II. CALCULATION OF THE ACCOUNTING QUANTITY FOR ACTIVITIES UNDER ARTICLE 3, PARAGRAPHS 3 AND 4

TABLE 3 - APPENDIX II shows in a tabular format the calculation of the accounting quantity for each of the activities under Article 3, paragraphs 3 and 4, for the first commitment period, based on the rules outlined in this manual. Symbols and formulae used in the table are explained on the following pages.

TABLE 5 - APPENDIX II contains a numerical example, also for the first commitment period, which shows the calculation of the accounting quantity for each activity under annual accounting after the fourth year of the commitment period, where the Party's total greenhouse gas (GHG) emissions and removals in the managed forest since 1990 are equal to or larger than the net source of emissions incurred under Article 3, paragraph 3.

For commitment period accounting, the steps for the example above would be identical, but the calculation would not be made or reported until after year five of the commitment period.

Table 3. Information table on accounting for activities under Article 3, paragraphs 3 and 4 of the Kyoto Protocol \*

Greenhouse gas source and sink activities	BY <sup>e</sup>	Net emission/removals <sup>a</sup>						Accounting Parameters <sup>g</sup>	Accounting Quantity
		2008	2009	2010	2011	2012	Total <sup>f</sup>		
(Gg CO <sub>2</sub> equivalent)									
A. Article 3.3 activities									
A.1. Afforestation and Reforestation									AQAR <sub>T</sub>
A.1.1. Units of land not harvested since the beginning of the commitment period <sup>b</sup>		AR <sup>nh</sup> <sub>t</sub>	AR <sup>nh</sup> <sub>t</sub>	AR <sup>nh</sup> <sub>t</sub>	AR <sup>nh</sup> <sub>t</sub>	AR <sup>nh</sup> <sub>t</sub>	AR <sup>nh</sup> <sub>T</sub>		AQAR <sup>nh</sup> <sub>T</sub>
A.1.2. Units of land harvested since the beginning of the commitment period <sup>b</sup>									
(specify identification code)		AR <sup>h1</sup> <sub>t</sub>	AR <sup>h1</sup> <sub>t</sub>	AR <sup>h1</sup> <sub>t</sub>	AR <sup>h1</sup> <sub>t</sub>	AR <sup>h1</sup> <sub>t</sub>	AR <sup>h1</sup> <sub>T</sub>		AQAR <sup>h1</sup> <sub>T</sub>
		AR <sup>h2</sup> <sub>t</sub>	AR <sup>h2</sup> <sub>t</sub>	AR <sup>h2</sup> <sub>t</sub>	AR <sup>h2</sup> <sub>t</sub>	AR <sup>h2</sup> <sub>t</sub>	AR <sup>h2</sup> <sub>T</sub>		AQAR <sup>h2</sup> <sub>T</sub>
		AR <sup>h3</sup> <sub>t</sub>	AR <sup>h3</sup> <sub>t</sub>	AR <sup>h3</sup> <sub>t</sub>	AR <sup>h3</sup> <sub>t</sub>	AR <sup>h3</sup> <sub>t</sub>	AR <sup>h3</sup> <sub>T</sub>		AQAR <sup>h3</sup> <sub>T</sub>
A.2. Deforestation		D <sub>t</sub>	D <sub>t</sub>	D <sub>t</sub>	D <sub>t</sub>	D <sub>t</sub>	D <sub>T</sub>		AQD <sub>T</sub>
B. Article 3.4 activities									
B.1. Forest Management (if elected)		FM <sub>t</sub>	FM <sub>t</sub>	FM <sub>t</sub>	FM <sub>t</sub>	FM <sub>t</sub>	FM <sub>T</sub>		AQ <sub>FM</sub>
3.3 offset <sup>c</sup>								OFF <sub>ARD</sub>	AQ <sub>OFF</sub>
FM cap <sup>d</sup>								CAP	AQ <sub>CAP</sub>
B.2. Cropland Management (if elected)	CM <sub>BY</sub>	CM <sub>t</sub>	CM <sub>t</sub>	CM <sub>t</sub>	CM <sub>t</sub>	CM <sub>t</sub>	CM <sub>T</sub>	CM <sub>net</sub>	AQCM <sub>T</sub>
B.3. Grazing Land Management (if elected)	GLM <sub>BY</sub>	GLM <sub>t</sub>	GLM <sub>t</sub>	GLM <sub>t</sub>	GLM <sub>t</sub>	GLM <sub>t</sub>	GLM <sub>T</sub>	GLM <sub>net</sub>	AQGLM <sub>T</sub>
B.4. Revegetation (if elected)	RV <sub>BY</sub>	RV <sub>t</sub>	RV <sub>t</sub>	RV <sub>t</sub>	RV <sub>t</sub>	RV <sub>t</sub>	RV <sub>T</sub>	RV <sub>net</sub>	AQRV <sub>T</sub>

\* The accounting period (annual or commitment period) determines when the accounting quantity is calculated by the Party.

<sup>a</sup> All values are reported in table 5(KP) of the CRF for the relevant inventory year, as reported in the current submission, and are automatically entered in this table.<sup>b</sup> In accordance with paragraph 4 of the annex to decision 16/CMP.1, debits resulting from harvesting during the first commitment period following Afforestation and Reforestation since 1990 shall not be greater than credits accounted for on that unit of land.<sup>c</sup> In accordance with paragraph 10 of the annex to decision 16/CMP.1, for the first commitment period, a Party included in Annex I that incurs a net source of emissions under the provisions of Article 3, paragraph 3, may account for anthropogenic GHG emissions by sources and removals by sinks in areas under Forest Management under Article 3, paragraph 4, up to a level that is equal to the net source of emissions under the provisions of Article 3, paragraph 3, but not greater than 9.0 Mt of carbon times five, if the total anthropogenic GHG emissions by sources and removals by sinks in the managed forest since 1990 is equal to, or larger than, the net source of emissions incurred under Article 3, paragraph 3.<sup>d</sup> In accordance with paragraph 11 of the annex to decision 16/CMP.1, for the first commitment period only, additions to and subtractions from the assigned amount of a Party resulting from Forest Management under Article 3, paragraph 4, after the application of paragraph 10 of the annex to decision 16/CMP.1 and resulting from Forest Management project activities undertaken under Article 6, shall not exceed the value inscribed in the appendix of the annex to decision 16/CMP.1, times five.<sup>e</sup> Net emissions and removals in the Party's base year, as established by decision 9/CP.2.<sup>f</sup> Cumulative net emissions and removals for all years of the commitment period reported in the current submission.<sup>g</sup> The values in the cells '3.3 offset' and 'FM cap' are absolute values.<sup>h</sup> The accounting quantity is the total quantity of units to be added to or subtracted from a Party's assigned amount for a particular activity in accordance with the provisions of Article 7, paragraph 4, of the Kyoto Protocol.

Table 4. Key to symbols used in table 3

$AR_t^{nh}$	net emissions and removals for category A.1.1 for commitment period year t, in gigagrams of carbon dioxide equivalent (Gg CO <sub>2</sub> eq)
$AR_t^{hx}$	net emissions and removals for a particular land unit (x) in category A.1.2 for commitment period year t, in Gg CO <sub>2</sub> eq
$D_t$	net emissions and removals for category A.2 for commitment period year t, in Gg CO <sub>2</sub> eq
CAP	value inscribed for Party in annex to decision 16/CMP.1, converted to Gg CO <sub>2</sub> eq and multiplied by five
$FM_t$	net emissions and removals for category B.1 for commitment period year t, in Gg CO <sub>2</sub> eq
$CM_{By}$	net emissions and removals for category B.2 for the Party's base year, in Gg CO <sub>2</sub> eq
$CM_t$	net emissions and removals for category B.2 for commitment period year t in Gg CO <sub>2</sub> eq
$GLM_{By}$	net emissions and removals for category B.3 for the Party's base year, in Gg CO <sub>2</sub> eq
$GLM_t$	net emissions and removals for category B.3 for commitment period year t in Gg CO <sub>2</sub> eq
$RV_{By}$	net emissions and removals for category B.4 for the Party's base year, in Gg CO <sub>2</sub> eq
$RV_t$	net emissions and removals for category B.4 for commitment period year t in Gg CO <sub>2</sub> eq

## AFFORESTATION AND REFORESTATION

$AR_t^{nh}$  = net emissions and removals for category A.1.1. for commitment period year t, in Gg CO<sub>2</sub> eq

$$AR_T^{nh} = \sum_{t=2008}^N (AR_t^{nh}), \text{ where } N \text{ is the most recently reported year of the commitment period}$$

$$AQAR_T^{nh} = AR_T^{nh}$$

$AR_t^{hx}$  = net emissions and removals for a particular land unit in category A.1.2. for commitment period year t, in Gg CO<sub>2</sub> eq

$$AR_T^{hx} = \sum_{t=2008}^U (AR_t^{hx}) \text{ for a particular land unit (x), where } N \text{ is the most recently reported year of the commitment period}$$

$AQAR_T^{hx}$  : If  $AR_T^{hx} \geq 0$ , then  $AQAR_T^{hx} = 0$ , else  $AQAR_T^{hx} = AR_T^{hx}$

$$AQAR_T^h = \sum_{x=1}^U AQAR_T^{hx}, \text{ where } U \text{ is the last unit of land harvested}$$

$$AQAR_T = AQAR_T^{nh} + AQAR_T^h$$

## DEFORESTATION

$D_t$  = net emissions and removals for category A.2. for commitment period year t, in Gg CO<sub>2</sub> eq

$$D_T = \sum_{t=2008}^N (D_t), \text{ where } N \text{ is the most recently reported year of the commitment period}$$

$$AQD_t = AQ_{CAP} + AQ_{OFF}$$

Table 4. Key to symbols used in table 3 (continued)

FOREST MANAGEMENT	
CAP	= value inscribed for Party in annex to decision 16/CMP.1, converted to Gg CO <sub>2</sub> eq and multiplied by five
AQAR <sub>T</sub>	= total accounting quantity for afforestation and reforestation
AQD <sub>t</sub>	= total accounting quantity for deforestation
OFF <sub>ARD</sub>	: IF (AQAR <sub>T</sub> + AQD <sub>T</sub> ) ≤ 0, then OFF <sub>ARD</sub> = 0; else IF (AQAR <sub>T</sub> + AQD <sub>T</sub> ) < 165,000, then OFF <sub>ARD</sub> = (AQAR <sub>T</sub> + AQD <sub>T</sub> ); else OFF <sub>ARD</sub> = 165,000
FM <sub>t</sub>	= net emissions and removals for category B.1. for commitment period year t, in Gg CO <sub>2</sub> eq
FM <sub>T</sub>	= $\sum_{t=2008}^N (FM_t)$ , where N is the most recently reported year of the commitment period
AQ <sub>OFF</sub>	: If the total anthropogenic GHG emissions by sources and removals by sinks in the managed forest since 1990 <sup>1</sup> is equal to, or larger than, the net source of emissions incurred under Article 3, paragraph 3, <sup>2</sup> then if (OFF <sub>ARD</sub> = 0 or FM <sub>T</sub> ≥ 0), then AQ <sub>OFF</sub> = 0; else if  FM <sub>T</sub>   < OFF <sub>ARD</sub> then AQ <sub>OFF</sub> = FM <sub>T</sub> ; else AQ <sub>OFF</sub> = -OFF <sub>ARD</sub> else AQ <sub>OFF</sub> = 0
AQ <sub>CAP</sub>	: If  FM <sub>T</sub> - AQ <sub>OFF</sub>   ≤ CAP, then AQ <sub>CAP</sub> = FM <sub>T</sub> - AQ <sub>OFF</sub> , else if FM <sub>T</sub> - AQ <sub>OFF</sub> < 0, then AQ <sub>CAP</sub> = -CAP; else AQ <sub>CAP</sub> = CAP
AQ <sub>FM</sub>	= AQ <sub>CAP</sub> + AQ <sub>OFF</sub>
CROPLAND MANAGEMENT	
CM <sub>By</sub>	= net emissions and removals for category B.2. for the Party's base year, in Gg CO <sub>2</sub> eq
CM <sub>t</sub>	= net emissions and removals for category B.2. for commitment period year t in Gg CO <sub>2</sub> eq
CM <sub>T</sub>	= $\sum_{t=2008}^N (CM_t)$ , where N is the most recently reported year of the commitment period
CP <sub>N</sub>	= number of years reported since the beginning of the commitment period,
CP <sub>N</sub>	= N - 2007, where N is the most recently reported year of the commitment period
CM <sub>net</sub>	= CM <sub>By</sub> × CP <sub>N</sub>
AQCM <sub>T</sub>	= CM <sub>T</sub> - CM <sub>net</sub>

Table 4. Key to symbols used in table 3 (continued)

<b>GRAZING LAND MANAGEMENT</b>	
$GLM_{BY}$	= net emissions and removals for category B.3. for the Party's base year, in Gg CO <sub>2</sub> eq
$GLM_t$	= net emissions and removals for category B.3. for commitment period year t in Gg CO <sub>2</sub> eq
$GLM_T$	= $\sum_{t=2008}^N (GLM_t)$ , where N is the most recently reported year of the commitment period
$CP_N$	= number of years reported since the beginning of the commitment period,
$CP_N$	= $N - 2007$ , where N is the most recently reported year of the commitment period
$GLM_{net}$	= $GLM_{BY} \times CP_N$
$AQGLM_T$	= $GLM_T - GLM_{net}$
<b>REVEGETATION</b>	
$RV_{BY}$	= net emissions and removals for category B.4. for the Party's base year, in Gg CO <sub>2</sub> eq
$RV_t$	= net emissions and removals for category B.4. for commitment period year t in Gg CO <sub>2</sub> eq
$RV_T$	= $\sum_{t=2008}^N (RV_t)$ , where N is the most recently reported year of the commitment period
$CP_N$	= number of years reported since the beginning of the commitment period,
$CP_N$	= $N - 2007$ , where N is the most recently reported year of the commitment period
$RV_{net}$	= $RV_{BY} \times RV_N$
$AQRV_T$	= $RV_T - RV_{net}$

<sup>1</sup> Without prejudice to paragraph 10 of the annex to decision 16/CMP.1 this test is valid only when using the absolute value of the total anthropogenic GHG emissions by sources and removals by sinks.

<sup>2</sup> The Party should provide information in the NIR on whether this condition has been met.

Table 5. Information table on accounting for activities under Article 3, paragraphs 3 and 4 of the Kyoto Protocol \*

Greenhouse gas source and sink activities	BY <sup>e</sup>	Net emission/removals <sup>a</sup>					Accounting Parameters <sup>g</sup>	Accounting Quantity
		2008	2009	2010	2011	2012		
(Gg CO <sub>2</sub> equivalent)								
A. Article 3.3 activities								
A.1. Afforestation and Reforestation								-75
A.1.1. Units of land not harvested since the beginning of the commitment period <sup>b</sup>		-10	-10	-10	-10		-40	-40
A.1.2. Units of land harvested since the beginning of the commitment period <sup>b</sup>								-35
Unit A		-2	-2	-5	-3		-12	-12
Unit B		-4	10	-3	-6		-3	-3
Unit C		-4	-3	-2	15		6	0
Unit D		-3	10	0	-4		3	0
Unit E		-5	-5	-5	-5		-20	-20
A.2. Deforestation		-30	200	0	-10		160	160
B. Article 3.4 activities								
B.1. Forest Management (if elected)		-60	-80	-60	-40		-240	-150
3.3 offset <sup>c</sup>							85	-85
FM cap <sup>d</sup>							65	-65
B.2. Cropland Management (if elected)	-2	-10	-10	-10	-6		-36	-28
B.3. Grazing Land Management (if elected)	5	-2	-3	-3	-4		-12	-32
B.4. Revegetation (if elected)	0	-3	-3	-5	-5		-16	-16

\* The accounting period (annual or commitment period) determines when the accounting quantity is calculated by the Party. This example is of annual accounting for the fourth year of the commitment period.

<sup>a</sup> All values are reported in table 5(KP) of the CRF for the relevant inventory year, as reported in the current submission, and are automatically entered in this table.

<sup>b</sup> In accordance with paragraph 4 of the annex to decision 16/CMP.1, debits resulting from harvesting during the first commitment period following Afforestation and Reforestation since 1990 shall not be greater than credits accounted for on that unit of land.

<sup>c</sup> In accordance with paragraph 10 of the annex to decision 16/CMP.1, for the first commitment period, a Party included in Annex I that incurs a net source of emissions under the provisions of Article 3, paragraph 3, may account for anthropogenic GHG emissions by sources and removals by sinks in areas under Forest Management under Article 3, paragraph 4, up to a level that is equal to the net source of emissions under the provisions of Article 3, paragraph 3, but not greater than 9.0 Mt of carbon times five, if the total anthropogenic GHG emissions by sources and removals by sinks in the managed forest since 1990 is equal to, or larger than, the net source of emissions incurred under Article 3, paragraph 3.

<sup>d</sup> In accordance with paragraph 11 of the annex to decision 16/CMP.1, for the first commitment period only, additions to and subtractions from the assigned amount of a Party resulting from Forest Management under Article 3, paragraph 4, after the application of paragraph 10 of the annex to decision 16/CMP.1 and resulting from Forest Management project activities undertaken under Article 6, shall not exceed the value inscribed in the appendix of the annex to decision 16/CMP.1, times five.

<sup>e</sup> Net emissions and removals in the Party's base year, as established by decision 9/CP.2.

<sup>f</sup> Cumulative net emissions and removals for all years of the commitment period reported in the current submission.

<sup>g</sup> The values in the cells '3.3 offset' and 'FM cap' are absolute values.

<sup>h</sup> The accounting quantity is the total quantity of units to be added to or subtracted from a Party's assigned amount for a particular activity in accordance with the provisions of Article 7, paragraph 4, of the Kyoto Protocol.



### III. LIST OF REFERENCES

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#### DECISIONS OF THE CONFERENCE OF THE PARTIES TO THE UNFCCC

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DECISION 14/C.P.7. *Impact of single projects on emissions during the commitment period*. (FCCC/CP/2001/13/Add.1).

DECISION 18/CP.8. *Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, part I: UNFCCC reporting guidelines on annual inventories*. (FCCC/CP/2002/7/Add.2).

DECISION 24/CP.8. *Technical standards for data exchange between registry systems under the Kyoto Protocol*. (FCCC/CP/2002/7/Add.3).

DECISION 13/CP.9. *Good practice guidance for land use, land-use change and forestry in the preparation of national greenhouse gas inventories under the Convention*. (FCCC/CP/2003/6/Add.1).

DECISION 15/CP.10. *Good practice guidance for land use, land-use change and forestry activities under Article 3, paragraphs 3 and 4, of the Kyoto Protocol.* (FCCC/CP/2004/10/Add.2).

DECISION 16/CP.10. *Issues relating to registry systems under Article 7, paragraph 4, of the Kyoto Protocol.* (FCCC/CP/2004/10/Add.2).

DECISION 14/CP.11. *Tables of the common reporting format for land use, land-use change and forestry.* (FCCC/CP/2005/5/Add.2).

#### DECISIONS OF THE CONFERENCE OF THE PARTIES SERVING AS THE MEETING OF THE PARTIES TO THE KYOTO PROTOCOL

DECISION 2/CMP.1. *Principles, nature and scope of the mechanisms pursuant to Articles 6, 12 and 17 of the Kyoto Protocol.* (FCCC/KP/CMP/2005/8/Add.1).

DECISION 3/CMP.1. *Modalities and procedures for a clean development mechanism as defined in Article 12 of the Kyoto Protocol.* (FCCC/KP/CMP/2005/8/Add.1).

DECISION 5/CMP.1. *Modalities and procedures for afforestation and reforestation project activities under the clean development mechanism in the first commitment period of the Kyoto Protocol.* (FCCC/KP/CMP/2005/8/Add.1).

DECISION 6/CMP.1. *Simplified modalities and procedures for small-scale afforestation and reforestation project activities under the clean development mechanism in the first commitment period of the Kyoto Protocol and measures to facilitate their implementation.* (FCCC/KP/CMP/2005/8/Add.1).

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#### IV. INITIAL ASSIGNED AMOUNT OF PARTIES INCLUDED IN ANNEX I TO THE CONVENTION THAT ARE ALSO PARTIES TO THE KYOTO PROTOCOL

The initial assigned amount in [TABLE 6-APPENDIX IV](#) was obtained from the compilation and accounting database.

**Table 6. Initial assigned amount of Annex I Parties**

Annex I Party	Tonnes of carbon dioxide equivalent	Annex I Party	Tonnes of carbon dioxide equivalent
Australia <sup>a</sup>		Latvia	119,182,130
Austria	343,866,009	Liechtenstein	1,055,623
Belarus		Lithuania	227,306,177
Belgium	673,995,528	Luxembourg	47,402,996
Bulgaria	610,045,827	Monaco	495,221
Canada	2,791,792,771	Netherlands	1,001,262,141
Croatia <sup>a</sup>		New Zealand	309,564,733
Czech Republic	893,541,801	Norway	250,576,797
Denmark	276,838,955	Poland	2,648,181,038
Estonia	196,062,637	Portugal	381,937,527
European Community	19,621,381,509	Romania	1,279,835,099
Finland	355,017,545	Russian Federation	16,617,095,319
France	2,819,626,640	Slovakia	331,433,516
Germany	4,868,096,694	Slovenia	93,628,593
Greece	668,669,806	Spain	1,666,195,929
Hungary	542,366,600	Sweden	375,188,561
Iceland	18,523,847	Switzerland	242,838,402
Ireland	314,184,272	Ukraine	4,604,184,663
Italy	2,416,277,898	United Kingdom of Great Britain and Northern Ireland	3,412,080,630
Japan	5,928,257,666		

<sup>a</sup> At the time of the publication of this manual, the reviews of the initial reports of Australia and Croatia were still in progress.

## V. GLOSSARY OF TERMS

<b>Accounting quantity</b>	The cumulative quantity of units that a Party must issue for removals or cancel for emissions from an Article 3, paragraph 3 or 4, activity, for a given year of the commitment period. A negative accounting quantity corresponds to net removals and indicates that the Party has a cumulative obligation to add to its assigned amount by issuing an equivalent quantity of removal units (RMUs) for that activity. A positive accounting quantity corresponds to net emissions, and indicates that the Party must subtract from its assigned amount by cancelling the corresponding quantity of units.
<b>Adjustment</b>	A change to a Party's inventory estimates, which may be calculated by an expert review team (ERT) if the inventory information reported by the Party is incomplete or has not been prepared in a manner consistent with Intergovernmental Panel on Climate Change (IPCC) methodologies and good practice guidance. Adjustments are applied with the agreement of the Party concerned, or by the enforcement branch, and are recorded in the compilation and accounting database (CAD).
<b>Annex I</b>	The annex to the Convention specifying which developed country Parties and other Parties to the Convention have committed themselves to limiting anthropogenic emissions and enhancing their greenhouse gas (GHG) sinks and reservoirs.
<b>Annex A</b>	An annex to the Kyoto Protocol that specifies the inventory sources and sectors that are counted toward a Party's emission limitation and reduction commitment.
<b>Annex B</b>	An annex to the Kyoto Protocol that specifies the emission limitation and reduction commitment for each Party included in Annex I to the Convention (Annex I Party) as a percentage of that Party's emissions in its base year or period.
<b>Assigned amount</b>	The total quantity of valid emissions allowances (Kyoto units) held by a Party within its national registry. The initial assigned amount for a Party is determined by its base year emissions, and its emission limitation and reduction objective contained in Annex B to the Kyoto Protocol. Any Kyoto units that the Party acquires through the Kyoto mechanisms, or issues for removals from land use, land-use change and forestry (LULUCF) activities under Article 3, paragraphs 3 and 4, are added to the Party's assigned amount; any units that the Party transfers, or cancels for emissions from LULUCF activities under Article 3, paragraphs 3 and 4, are subtracted from the Party's assigned amount. At the end of the commitment period, each Party must ensure that its total Annex A emissions over the commitment period are less than or equal to its total assigned amount.
<b>Assigned amount unit (AAU)</b>	A Kyoto unit representing an allowance to emit one metric tonne of carbon dioxide equivalent (CO <sub>2</sub> eq). AAUs are created (issued) up to the level of a Party's initial assigned amount.
<b>Cancellation</b>	The transfer of a unit to a cancellation account. Units in a cancellation account may not be further transferred, and may not be used towards meeting a Party's Article 3, paragraph 1, commitment. There are four types of cancellation: net source, non-compliance, voluntary and mandatory.
<b>Carry-over</b>	The authorization for a unit that was issued in one commitment period to be used in a subsequent commitment period. Individual unit types are subject to different rules for carry-over.
<b>Certified emission reduction (CER)</b>	A Kyoto unit representing an allowance to emit one metric tonne of CO <sub>2</sub> eq. CERs are issued for emission reductions from clean development mechanism (CDM) project activities. Two special types of CERs called temporary certified emission reductions (tCERs) and long-term certified emission reductions (lCERs) are issued for emission removals from afforestation and reforestation CDM projects.

<b>Clean development mechanism (CDM)</b>	A Kyoto Protocol mechanism that allows Annex I Parties to purchase emission allowances from projects in non-Annex I Parties that reduce or remove emissions. The emission allowances from CDM projects are called certified emission reductions (CERs).
<b>Commitment period</b>	The time frame in which the Kyoto Protocol's emission limitation and reduction commitments apply. The first commitment period is 2008 – 2012.
<b>Commitment period reserve (CPR)</b>	A requirement for each Annex I Party to maintain a minimum quantity of valid Kyoto units in its national registry at all times. The CPR is intended to prevent Parties from over-transferring units and thus jeopardize their ability to meet their Article 3, paragraph 1, commitment.
<b>Compilation and accounting database (CAD)</b>	The official repository of information related to each Party's accounting of emissions and assigned amount under the Kyoto Protocol. The CAD also maintains information on each Party's eligibility to participate in the Kyoto mechanisms and other information necessary for accounting of emissions and assigned amount (such as elections of LULUCF activities under Article 3, paragraph 4). It is maintained by the secretariat.
<b>Correction</b>	A change to a Party's reported holdings of Kyoto units. A correction may be recommended by an ERT if a Party's transaction of Kyoto units is not in conformity with the Kyoto Protocol accounting rules. Corrections are applied by the enforcement branch and recorded in the CAD.
<b>Discrepancy</b>	A violation of the Kyoto Protocol transaction rules. A discrepancy will arise if a national registry initiates a transaction that is not allowed by the Kyoto Protocol rules.
<b>Emission reduction unit (ERU)</b>	A Kyoto unit representing an allowance to emit one metric tonne of CO <sub>2</sub> eq. ERUs are generated for emission reductions or emission removals from joint implementation (JI) project activities by converting an equivalent quantity of the Party's existing AAUs or RMUs.
<b>Emissions trading</b>	One of the three Kyoto Protocol emissions trading mechanisms, by which an Annex I Party may transfer Kyoto units to or acquire units from another Annex I Party. A Party must meet specific eligibility requirements to participate in emissions trading.
<b>Enforcement branch</b>	One of two branches of the Compliance Committee, responsible for addressing questions of implementation regarding a Party's implementation of methodological and reporting requirements related to its accounting of emissions and assigned amount, and for determining and applying consequences for non-compliance with its Article 3, paragraph 1, commitment.
<b>Expedited review</b>	A review, conducted by an ERT under Article 8, which focuses on a matter that led to the suspension of a Party's eligibility to participate in the Kyoto mechanisms. An expedited review is conducted within a much shorter time frame than a normal review.
<b>Expert review team (ERT)</b>	An international team of experts, nominated by Parties, that is responsible for conducting reviews under Article 8 of the Kyoto Protocol.
<b>Expiry</b>	The point in time at which a tCER or ICER becomes invalid. Each tCER and ICER must be replaced by another unit prior to its expiry.
<b>Facilitative branch</b>	A branch of the Compliance Committee mandated to provide advice and facilitation to Parties in implementing the Kyoto Protocol and to promote compliance by Parties with their Kyoto Protocol commitment.
<b>Holding account</b>	A type of account in a national (or the CDM) registry, where valid Kyoto units are recorded. Each national registry must contain at least one holding account for the Party.
<b>Inconsistency</b>	A difference between a national registry's records of holdings and the International Transaction Log's (ITL) records of holdings for that registry at a particular point in time, as identified through the reconciliation procedures of the ITL.

<b>International Transaction Log (ITL)</b>	An electronic data system, administered by the secretariat, which monitors and tracks Parties' transactions of Kyoto units.
<b>Issuance</b>	The term used to refer to the creation of an individual Kyoto unit.
<b>Joint implementation (JI)</b>	A Kyoto Protocol mechanism that allows Annex I Parties to purchase emission allowances from projects in other Annex I Parties that reduce or remove emissions. The emission allowances from JI projects are called emission reduction units (ERUs).
<b>JI Track 2</b>	One of two approaches for verifying emission reductions under JI, whereby each JI project is subject to verification procedures established under the supervision of the Joint Implementation Supervisory Committee (JISC). JI Track 2 procedures require that each project be reviewed by an accredited independent entity to determine whether the project meets the requirements established under Article 6.
<b>Kyoto mechanisms</b>	The three mechanisms for transferring and acquiring emission allowances between Parties under the Kyoto Protocol. They are emissions trading, JI and the CDM.
<b>Land use, land-use change and forestry (LULUCF)</b>	A GHG inventory sector subject to different accounting rules than Annex A sectors.
<b>Long-term certified emission reduction (ICER)</b>	A Kyoto unit representing an allowance to emit one metric tonne of CO <sub>2</sub> eq. ICERs are issued for emission removals from CDM afforestation and reforestation project activities that have a long, renewable, crediting period.
<b>National system</b>	A Party's institutions and procedures for the planning, preparation and archiving of GHG inventory data.
<b>National registry</b>	An electronic database maintained by a Party, or group of Parties, for the transfer and tracking of units in accordance with the Kyoto Protocol rules.
<b>Non-Annex I Parties</b>	Parties not included in Annex I to the Convention.
<b>Question of implementation</b>	A problem with a Party's implementation of a particular commitment identified by an ERT which, if unresolved, is brought to the attention of the Compliance Committee. Only an ERT or a Party can raise a question of implementation.
<b>Removal unit (RMU)</b>	A Kyoto unit representing an allowance to emit one metric tonne of CO <sub>2</sub> eq. RMUs are issued for emission removals from LULUCF activities under Article 3, paragraphs 3 and 4.
<b>Replacement</b>	The transfer of a Kyoto unit to a replacement account in order to replace a tCER or ICER that has expired, or a ICER that has been subject to reversal of storage or non-certification.
<b>Retirement</b>	The transfer of a unit to a retirement account to be used towards meeting a Party's Article 3, paragraph 1, commitment.
<b>Standard electronic format for reporting Kyoto Protocol units (SEF)</b>	An agreed format, embodied in a special report, for reporting Kyoto units.
<b>Supplementary Transaction Log (STL)</b>	An electronic data system, administered by a Party or group of Parties, which monitors and tracks transactions of units under a national or regional trading system. Such transaction logs are supplementary to the ITL.
<b>Temporary certified emission reduction (tCER)</b>	A Kyoto unit representing an allowance to emit one metric tonne of CO <sub>2</sub> eq. tCERs are issued for emission removals from CDM afforestation and reforestation project activities that have a short, non-renewable, crediting period.
<b>Track 1</b>	One of two approaches for verifying emission reductions under JI, whereby the Party concerned may verify its own emission reductions according to its national procedures.
<b>True-up period</b>	A 100-day period after final emissions have been reported for the commitment period during which Parties have the opportunity to undertake final transactions necessary to achieve compliance with their Article 3, paragraph 1, commitment.



## VI. ACRONYMS AND ABBREVIATIONS

AAU	assigned amount unit	FM	forest management
AR	afforestation and reforestation	GHG	greenhouse gas
AQAR	accounting quantity for afforestation and reforestation	GM	grassland management
AQD	accounting quantity for deforestation	HFCs	hydrofluorocarbons
CAD	compilation and accounting database	IAR	independent assessment report
CDM	clean development mechanism	ID	notification identification information
CER	certified emission reduction	IPCC	Intergovernmental Panel on Climate Change
CH <sub>4</sub>	methane	ISO	International Organization for Standardization
CITL	(European) Community Independent Transaction Log	ITL	International Transaction Log
CM	cropland management	JI	joint implementation
CO <sub>2</sub>	carbon dioxide	JISC	Joint Implementation Supervisory Committee
COP	Conference of the Parties	ICER	long-term certified emission reduction
CMP	Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol	LULUCF	land use, land-use change and forestry
CPR	commitment period reserve	N <sub>2</sub> O	nitrous oxide
CRF	common reporting format	NIR	national inventory report
D	deforestation	PFCs	perfluorocarbons
DES	data exchange standards	QA/QC	quality assurance/quality control
DOE	designated operational entity	RMU	removal unit
EC	European Community	RSA	Registry System Administrators (forum)
eq	equivalent	RV	revegetation
ERT	expert review team	SEF	standard electronic format for reporting Kyoto Protocol units
ERU	emission reduction unit	SF <sub>6</sub>	sulphur hexafluoride
EU ETS	European Union emissions trading scheme	STL	supplementary transaction log
F-gases	fluorinated gases	tCER	temporary certified emission reduction
FAO	Food and Agriculture Organization of the United Nations	UNFCCC	United Nations Framework Convention on Climate Change

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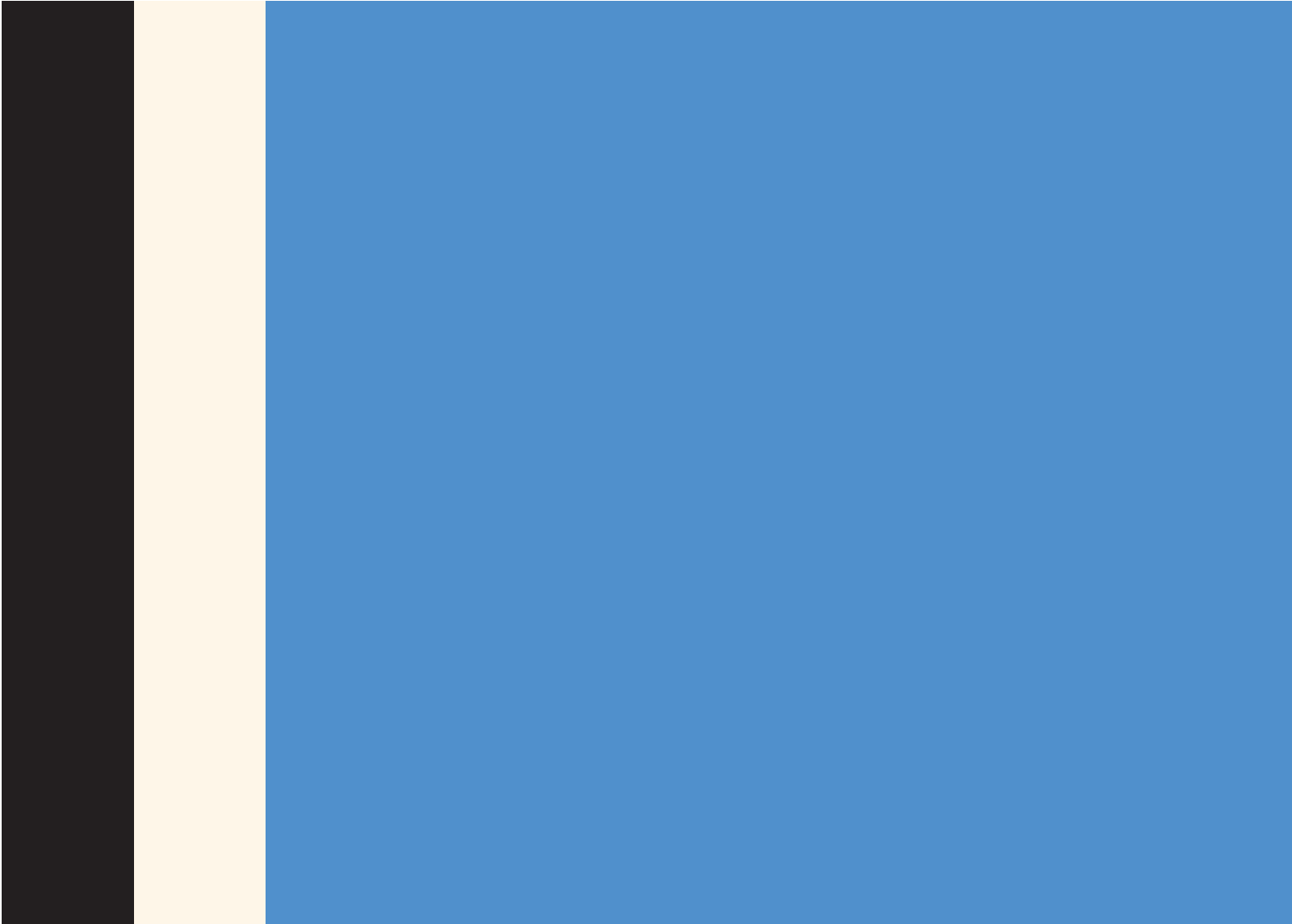
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