

Climate Change Expert Group
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**Reporting progress towards
Nationally Determined
Contributions: exploring possible
common tabular formats for the
structured summary**

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OECD/IEA CLIMATE CHANGE EXPERT GROUP PAPERS

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Foreword

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Abstract

Reporting progress towards Nationally Determined Contributions: exploring possible common tabular formats for the structured summary

Common Tabular Formats (CTFs) for the reporting of information necessary to track progress towards Nationally Determined Contributions (NDCs) under Article 4 of the Paris Agreement, including on the use of cooperative approaches, are to be adopted by COP26. This paper explores concrete examples and worked examples for the structured summary of information to track progress, including on information on cooperative approaches. This paper finds that the structured summary would be more likely to meet the principles established in the Paris Agreement and related decisions, including the Modalities, Procedures and Guidelines (MPGs), if it was separated into CTFs for reporting on tracking progress indicators and a CTF for reporting on the use of cooperative approaches. Each of these CTFs can be developed in such a way as to provide all Parties with the same prompts for reporting on progress towards diverse NDCs, which could help to improve consistency, comparability and completeness of information reported. CTFs could therefore have a role in improving the reporting system and facilitating the review system under the Enhanced Transparency Framework (ETF) as well as potentially in facilitating the contribution of the ETF to the global stocktake.

JEL Classification: F53, Q54, Q56, Q58

Keywords: climate change, transparency, reporting, emissions, progress

Résumé

Notification des progrès accomplis dans la réalisation des contributions déterminées au niveau national : types de tableau commun propices à une synthèse structurée

La COP26 doit être l'occasion de convenir des tableaux communs à utiliser pour communiquer les informations nécessaires au suivi des progrès accomplis dans la réalisation des contributions déterminées au niveau national (CDN) conformément à l'Article 4 de l'Accord de Paris, notamment eu égard à la coopération. Dans le présent document sont exposés des exemples concrets et aboutis de modes de présentation synthétique et structurée des informations nécessaires au suivi des progrès, notamment celles qui touchent aux modalités de la coopération. Il apparaît que, selon toute vraisemblance, le meilleur moyen de respecter les principes énoncés dans l'Accord de Paris et les décisions connexes, y compris les modalités, procédures et lignes directrices, consiste à dédier un tableau commun aux indicateurs de suivi des progrès et un autre aux démarches de coopération. Il est possible de les construire de façon que l'ensemble des Parties disposent d'auxiliaires identiques pour rendre compte du chemin parcouru vers la réalisation des CDN. Il y a tout lieu de penser que les renseignements communiqués gagneraient ainsi en cohérence, en comparabilité et en exhaustivité. Ainsi, les tableaux communs pourraient contribuer à améliorer le système de notification tout en facilitant la procédure d'examen fondée sur le Cadre de transparence renforcé et, éventuellement, l'utilisation de ce cadre dans l'établissement du bilan mondial.

Classification JEL : F53, Q54, Q56, Q58

Mots-clés : changement climatique, transparence, notification, émissions, progrès

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List of Acronyms

BAU	Business-as-usual
BTR	Biennial Transparency Report (under the Paris Agreement)
CCXG	Climate Change Expert Group
CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
CO₂	Carbon dioxide
COP	Conference of the Parties (to the UNFCCC)
CTF	Common Tabular Format
ETF	Enhanced Transparency Framework (as agreed in decision 18/CMA.1)
GDP	Gross Domestic Product
GHG	Greenhouse gas
GST	Global Stocktake (as laid out in Article 14 of the Paris Agreement)
IEA	International Energy Agency
IP	Implementation Period (of a NDC)
INDC	Intended Nationally Determined Contribution
ITMO	Internationally Transferred Mitigation Outcome
KP	Kyoto Protocol
LDC	Least Developed Country
MPG	Modalities, Procedures and Guidelines (as found in the Annex to decision 18/CMA.1)
NDC	Nationally Determined Contribution

- OECD** Organisation for Economic Co-Operation and Development
- TACCC** Transparency, Accuracy, Completeness, Comparability, Consistency
- TER** Technical Expert Review
- TERT** Technical Expert Review Team
- UN** United Nations
- UNFCCC** United Nations Framework Convention on Climate Change
- SBSTA** Subsidiary Body for Scientific and Technological Advice

Executive summary

The Modalities, Procedures and Guidelines (MPGs), adopted at the United Nations (UN) Climate Change Conference in Katowice in 2018, define the set of rules for reporting and review of information submitted by Parties under the Enhanced Transparency Framework (ETF) of the Paris Agreement. These MPGs indicate that Parties “shall” provide information needed to track progress made in implementing and achieving NDCs under Article 4 of the Paris Agreement in a “structured summary”. The Subsidiary Body for Scientific and Technological Advice (SBSTA) is currently tasked with several different aspects of operationalising the MPGs. This includes developing “common tabular formats” (CTFs) for the reporting of information on tracking progress, for consideration and adoption by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) at its third session during the UN Climate Change Conference planned to take place in Glasgow, now deferred to 2021.

This paper explores different possible structures of CTFs for the structured summary for reporting of information for tracking progress towards NDCs under Article 4 of the Paris Agreement (henceforth, this paper uses the term NDC to denote “NDCs under Article 4 of the Paris Agreement”). Such CTFs would include reporting, i.a. on indicators identified by Parties to track progress, as well as on the use of cooperative approaches. This paper develops different example CTFs and worked examples for a structured summary table, and explores how the different examples perform against a given set of criteria. These include whether the example CTFs allow for the reporting of quantitative and/or qualitative indicators and narrative information; and to what extent the example structures for CTFs promote the Transparency, Accuracy, Completeness, Comparability, Consistency (TACCC) principles of the Paris Agreement.

The purpose(s) of that reporting on progress will influence the content and format of information that needs to be reported. Potential purposes include to:

- Provide a clear understanding of climate change action in the process of tracking progress made in implementing and achieving NDCs (Annex to decision 18/CMA.1, Section I.A);
- Promote Transparency, Accuracy, Completeness, Comparability, Consistency (TACCC) principles (Annex to decision 18/CMA.1, Section I.B);
- Facilitate improved reporting and transparency over time (Annex to decision 18/CMA.1; Section I.D);
- Facilitate the Technical Expert Review (TER) of information reported by Parties and help the Technical Expert Review Team (TERT) in its “consideration of the Party’s implementation and achievement of its NDC under Article 4 of the Paris Agreement” (Annex to decision 18/CMA.1, Sections I.D and VII);
- Contribute to assessing collective progress towards the goals of the Paris Agreement (Paris Agreement, Article 13, paragraph 5).

Parties’ NDCs have diverse forms and content. Indeed, most current NDCs vary little, if at all, from the Intended Nationally Determined Contributions (INDCs) submitted in the lead up to the UN Climate Change Conference in Paris, in 2015, when little guidance was available on their format and content. Since then, guidance on NDCs has been developed and adopted internationally (UNFCCC, 2018^[1]), which may lead

to more similar NDCs over time. A key challenge for developing a structured summary today is however in ensuring that it adequately accommodates the diverse types of information needed to characterise progress towards the different types of NDCs currently on the table, ensuring all Parties report under the ETF from the beginning. Considering the wide range of views put forward by Parties both in their submissions and in the negotiating rooms, this paper explores one common structured summary that could be used by all Parties to report on progress made in implementing and achieving NDCs, including on reporting on cooperative approaches. This proposed structured summary is made up of three common CTFs. These contain: (i) information on description of indicators, reference and target levels (CTF I); (ii) information on progress made in implementing and achieving NDCs (CTF II) and (iii) information on the use of cooperative approaches (CTF III), the latter being needed for calculating GHG emissions balances to be reported in CTF II and so potentially forming a sub-component of CTF II.

This paper has developed examples for all three CTFs. For CTFs I and II, on information on the description of indicators, reference and target levels and on progress, respectively, the paper explores one example each. In order for the structured summary to accommodate for all types of NDCs, this paper finds that CTFs I and II need to be set up in such a way as to provide Parties with sufficient leeway to report on their selected indicators of progress, and in the way(s) that they choose to do so. Such CTFs would have the advantage of providing enough prompts to Parties on the information field they need to report, without constraining the type of information to be reported.

In worked examples for different types of NDCs, this paper shows that Parties can use structured summary CTFs I and II to report on quantitative and/or qualitative indicators and narrative information, make use of notation keys (e.g. to indicate when information is not estimated or not applicable) and make references to detailed information contained in Biennial Transparency Reports (BTRs). Such a format allows therefore each Party to report on progress towards its NDC in a complete and transparent manner. If the NDC architecture and content stay the same, using the same format over different periods of time would also allow for consistent reporting by each Party over time. From a reporting Party's perspective, providing the information in tabular format is a way to organise the provision of important information, to ensure that reporting is both complete and transparent. Some of this information could potentially be lost or overlooked if it was provided in a narrative format.

The worked examples also show that the information provided could be quite diverse, as indicators relevant to one NDC may not be relevant to another. This means that using the common structured summary may improve comparability of information on progress towards similar types of NDCs. However, a common structured summary does not guarantee that the information will be comparable across all Parties. This may have implications for the aggregation of information to the global level in the context of the global stocktake. Nevertheless, in providing the same prompts to all Parties, such CTFs could facilitate the review of information by TERTs.

This paper also develops examples for reporting of information on the use of cooperative approaches under Article 6 of the Paris Agreement in the structured summary (CTF III). Annex to decision 18/CMA.1 Paragraph 77.d outlines a series of informational elements relating to cooperative approaches to be reported by Parties. Whether all of these elements are to be reported in a tabular format in the structured summary, or whether some of the information would be reported elsewhere (e.g. in supporting tables to the CTF; narrative format in the BTRs; in any Party reporting or centralised reporting to be developed under Article 6) remains open. The paper explores therefore three different "CTF III" examples for the common structured summary, varying in the extent to which they allow for both quantitative reporting, as well as narrative reporting (e.g. in relation to how each cooperative approach used promotes sustainable development and ensures environmental integrity).

The CTF III examples vary in length, and there is a correlation between the level of detail provided, and the level of transparency achieved. It is important to note that the level of detail of information on cooperative approaches required by reporting provisions laid out in Annex to decision 18/CMA.1 Paragraph

77.d may not achieve the level of detail necessary for a complete and robust reporting on the use of cooperative approaches under Article 6. There are currently several open questions relating to the framework for Article 6 (e.g. relating to what exactly an ITMO is and how it is measured), which have yet to be agreed. The answers to these questions are crucial in determining how an emissions balance is calculated. If any agreed Article 6 framework answers some or all of these open questions, it could significantly streamline transparent reporting of the use of cooperative approaches. The need for reporting of detailed information on the use of cooperative approaches in CTFs to track progress would also be lessened if this information is tracked and reported elsewhere, e.g. under provisions to be agreed under Article 6. A potential way forward could be to develop some “supporting tables” to report selected information, such as on use of units, vintages of units, or ITMOs not in t CO₂-eq metrics.

The paper also finds there is a correlation between the number of prompts provided to report on cooperative approaches and the completeness, comparability and consistency of information that is likely to be reported. The example CTFs developed in this paper highlight the potentially unwieldy nature of using a structured summary to report of significant levels of narrative information relating to cooperative approaches. Indeed, including significant levels of narrative information in individual CTFs could reduce the comparability across different countries’ CTFs on those specific aspects.

One important finding is that it is important to have a robust means of tracking the use of cooperative approaches, including between different implementation periods. Such a mechanism would ensure that any framework for Article 6 that allows for Parties to transfer ITMOs for a previous implementation period also tracks such transfers. For example, centralised tracking and/or individual Party reporting with details on individual transactions under Article 6 would allow Parties to recalculate any changes to their emissions balance and to re-assess and report the impact of any such transfers on an assessment of achieving their NDC. Any such reporting of the use of cooperative approaches developed under Article 6 of the Paris Agreement would lessen the need for detailed reporting via CTFs.

Given the variety of information that would be needed to make Parties’ reporting of information transparent, this paper finds that the structured summary would be more transparent and less unwieldy if it was separated into CTFs for reporting on indicators (CTFs I and II) and a CTF for reporting on the use of cooperative approaches (CTF III). Each of these CTFs can be developed in such a way as to provide all Parties with the same prompts for reporting on progress towards NDCs, where they can report on quantitative and/or qualitative indicators and on narrative information. Using CTFs could therefore help to improve consistency and comparability of information reported and could also encourage more complete reporting over time. Moreover, this paper finds that CTFs would facilitate transparency as they may focus reporting of all key information on tracking progress in one section of the BTR, rather than dispersed throughout it. CTFs could therefore have a role in improving the reporting system and facilitating the review system under the ETF as well as potentially in facilitating the contribution of the ETF to the global stocktake.

1 Introduction

The Paris Agreement requires (“shall”) Parties to report on a number of elements under the Enhanced Transparency Framework for action and support (ETF) (Paris Agreement, 2015^[2]). The Modalities, Procedures and Guidelines (MPGs) were adopted in decision 18/CMA.1 by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) in its first session in 2018 in Katowice (UNFCCC, 2018^[3]). The Annex to the decision 18/CMA.1 defines the set of rules for reporting and review of information submitted by Parties under the ETF. The MPGs indicate that Parties “shall” provide a “structured summary” of information needed to track progress made in implementing and achieving Nationally Determined Contributions (NDCs) under Article 4 of the Paris Agreement (henceforth, in using the term NDCs, this paper denotes “NDCs under Article 4 of the Paris Agreement”). A decision on further guidance on the mitigation elements of the Paris Decision (UNFCCC, 2016^[4]), also adopted by the CMA in 2018 in Katowice, states that Parties shall account for their NDCs in their Biennial Transparency Report (BTRs), including through a structured summary (UNFCCC, 2018^[1]).

There is a series of informational elements to be provided by Parties when tracking progress made in implementing and achieving their NDCs (Annex to decision 18/CMA.1, section III). These include information on:

- A. National circumstances and institutional arrangements (Annex to decision 18/CMA.1, Section III.A)
- B. A description of the Party's NDC (Annex to decision 18/CMA.1, Section III.B)
- C. Information necessary to track progress made in implementing and achieving NDCs (Annex to decision 18/CMA.1, Section III.C), including in a structured summary
- D. Information on mitigation policies and measures (Annex to decision 18/CMA.1, Section III.D)
- E. GHG projections (Annex to decision 18/CMA.1, Section III.E)

This paper focuses on C. Information necessary to track progress made in implementing and achieving NDCs (Annex to decision 18/CMA.1, Section III.C), specifically on the “structured summary”¹. The CMA has requested the Subsidiary Body for Scientific and Technological Advice (SBSTA) to develop “common tabular formats” (CTFs) for the reporting of information on tracking progress, including for the structured summary. Since the adoption of the MPGs in 2018 in Katowice, Parties have been negotiating the CTFs and agreement on CTFs is due by the third session of the CMA, to take place during the UN Climate Change Conference in Glasgow, now deferred to 2021.

According to the MPGs, in their structured summary, a Party “shall” provide information on “indicators that it has selected to track progress towards implementation and achievement of its NDC under Article 4. Indicators shall be relevant to a Party’s NDC under Article 4, and may be either qualitative or quantitative.” (Annex to decision 18/CMA.1 III.C paragraph 65). In addition, Parties are also to report in this structured summary, information related to internationally transferred mitigation outcomes (ITMOs) and mitigation outcomes (MOs) for Parties engaging “in cooperative approaches that involve the use of ITMOs towards

¹ This section does not develop examples of CTFs for reporting on assumptions, methodologies, accounting approaches and/or response measures.

an NDC under Article 4, or that authorize the use of MO for international mitigation purposes other than achievement of its NDC” (Annex to decision 18/CMA.1 III.C paragraph 77.d²). In addition to information on indicators and on cooperative approaches, Parties are to provide a description of the indicators used, of each methodology and/or accounting approaches and an explanation of how double counting of net greenhouse gas (GHG) emissions reductions has been avoided.

Several Parties have submitted their views to the UNFCCC on the format and content of the structured summary. Building on these views and previous CCXG work on this issue (Rocha, 2019^[5]), this paper reviews the current status of the negotiations on the topic (section 2). The paper then outlines the main sticking points and potential areas of work in 2020/21 (section 3). Finally, the paper explores (i) a concrete example for the structured summary for reporting on information for tracking progress made in implementing and achieving NDCs and (ii) examples for reporting on detailed information on cooperative approaches (section 4), before drawing conclusions.

² The provisions in this sub-paragraph (agreed at UN Climate Change Conference in Katowice in 2018) indicate that they will be implemented consistently with any future relevant decisions adopted by the CMA on Article 6 (to be agreed at COP26).

2 Context: progress in the negotiations to date and open questions

According to the MPGs, Parties are to provide a “structured summary” to track progress made in implementing and achieving their NDC under Article 4 of the Paris Agreement (Annex to decision 18/CMA.1, Section III.C paragraph 77). The MPGs provide a detailed list of the informational elements to be reported by Parties when tracking progress made in implementing and achieving NDCs (as laid out in Annex to decision 18/CMA.1 Section III.C). Parties have agreed that indicators used for tracking progress may be either quantitative or qualitative, are to be identified by the Party and relevant to the Party’s NDC (Annex to decision 18/CMA.1, Section III.C, paragraph 65). In addition, Parties engaging in cooperative approaches are to report on information related to ITMOs for Parties (Annex to decision 18/CMA.1 III.C paragraph 77.d).

Parties have been discussing the content, form and structure of the “structured summary” since the conclusion of CMA1 (Katowice, December 2018). Agreement on CTFs is due by CMA3 (Glasgow, now deferred to 2021), which could be challenging as negotiations under SBSTA as part of CMA2 (Madrid, December 2019) were unable to reach consensus on progress to date in this area. Parties also failed to reach consensus on the set of rules relating to Article 6³, which would further clarify what an ITMO is (e.g. what metrics it is expressed in), how ITMOs transfers are to be calculated and accounted for and whether further information on ITMOs would be required.

In this sense, the Paris Agreement (Paris Agreement, 2015^[2]), its accompanying decision (UNFCCC, 2016^[4]) and decision 18/CMA.1 (UNFCCC, 2018^[3]) remain to date the only agreed outcomes on these matters and will serve as the starting point for the analysis of this paper. It is crucial that the CTFs for reporting on information for tracking progress reflect the different principles of these outcomes, including e.g. ensuring environmental integrity; promoting the principles of Transparency, Accuracy, Completeness, Comparability, Consistency (TACCC); avoiding double counting; promoting improvement over time and preventing backsliding.

One way that could help further discussions on how to report information in structured summaries would be to consider the overall purposes of the structured summary, and how these could best be met. Considering the agreed outcomes to date, namely the Paris Agreement, the Paris Decision and decision 18/CMA.1, these purposes include, for example:

- Providing a clear understanding of climate change action in the process of tracking progress made in implementing and achieving NDCs (Annex to decision 18/CMA.1, Section I.A);
- Promoting Transparency, Accuracy, Completeness, Comparability, Consistency (TACCC) principles: the format of a structured summary may have important consequences on whether the information provided by Parties will be comparable, consistent or transparent (Annex to decision 18/CMA.1, Section I.B);

³ Regarding Article 6, the decision text requests SBSTA to continue work in 2020 noting that draft negotiating texts do not represent consensus amongst Parties (UNFCCC, 2019^[8]).

- Facilitate improved reporting and transparency over time (Annex to decision 18/CMA.1; Section I.D);
- Facilitating the Technical Expert Review (TER) of information reported by Parties and help the Technical Expert Review Team (TERT) in its “consideration of the Party’s implementation and achievement of its NDC under Article 4 of the Paris Agreement” (Annex to decision 18/CMA.1, Sections I.D and VII);
- Contributing (both during and after NDC implementation periods) to collective assessments in the context of the global stocktake under the Paris Agreement, in which case quantitative information could be needed (Paris Agreement, Article 13, paragraph 5 and Annex to decision 18/CMA.1, Sections I.A).

Assessing how the structured summary is to meet these purposes is key to deciding on the most suitable structure and format. In order to facilitate the TER, the structured summary needs to ensure that information reported is transparent and consistent. Moreover, as one of the purposes of the process of tracking progress towards NDCs through reporting in structured summary is to contribute to the global stocktake, then the information provided needs also to be as comparable as possible across Parties to allow aggregation to the global level. In promoting TACCC principles, the information reported would need to be, in addition, accurate and complete.

Beyond this question on the overall purpose of the structured summary, Table 1 summarises the informational elements to be provided by Parties under Annex to decision 18/CMA.1 Section III.C on tracking progress towards implementing and achieving NDCs in accordance with the adopted MPGs. For each of these elements, Table 1 identifies open questions that may influence the development of CTF for the structured summary. Table 1 is divided into two sub-tables. The first sub-table focuses on a possible minimum set of information listed as belonging in the structured summary (as contained in Annex to decision 18/CMA.1 III.C paragraph 77) and includes direct information on indicators identified by Parties and on the use of cooperative approaches. The second sub-table lists further information which may also be included in the structured summary. This may cover background information on the indicators and information on definitions, methodologies, accounting approaches and response measures.

Table 1 shows the wide variety of information different Parties would need to report on in order to track progress towards their NDC (Annex to decision 18/CMA.1 Section III.C). Information on quantitative and/or qualitative indicators may be straightforward and well suited to be reported in tabular format. If narrative information (e.g. on definitions, methodologies, accounting approaches) is reported in tables, this may render tables unwieldy and impractical – unless reporting on these topics is limited to providing cross-references to sources of more detailed information, e.g. a specific section of the BTR or a publicly-available description of the methodology. Table 1 identifies informational elements which may include significant levels of narrative information, and highlights whether they are best suited to be reported in tables or rather as summary information accompanied by references where further details are available.

Table 1. Required informational elements of structured summary according to the MPGs and open questions

Table 1a. Information relating to Annex to decision 18/CMA.1, Section III C, paragraph 77

Informational element under section III.C of the MPGs	Open questions
Structured summary, as per Annex to 18/CMA.1 paragraph 77	
<p>For each selected indicator (Annex to 18/CMA.1 III.C paragraph 65):*</p> <ul style="list-style-type: none"> • Information on selected indicators for reference point(s), level(s), baseline(s), base year(s) or starting point(s) (Annex to 18/CMA.1 III.C paragraph 67 and 77a(i)) • Information on each selected indicator for each previous reporting years during the implementation period (IP) (Annex to 18/CMA.1 III.C paragraph 68 and 77a(ii)) • The most recent information identified on selected indicators (Annex to 18/CMA.1 III.C paragraph 68 and 77a(iii)) 	<ul style="list-style-type: none"> • Indicators can be quantitative, qualitative – how can the structured summary accommodate for these different types of indicators? • Are Parties required to report on the same indicators during implementation and achievement period? • Indicators are self-determined and the CTFs are common – how can the information reported in a structured summary be comparable so as to inform the global stocktake, thereby, providing a clear understanding of climate action in light of Article 2 collective objectives?
<p>Where applicable, information on GHG emissions and removals consistent with the coverage of its NDC under Article 4 (Annex to 18/CMA.1 III.C paragraph 77b)**</p>	<ul style="list-style-type: none"> • If the NDC target is not formulated in terms of GHG emissions, is this information not applicable?
<p>Contribution from the LULUCF sector for each year of the target period or target year, if not included in the inventory time series of total net GHG emissions and removals, as applicable (Annex to 18/CMA.1 III.C paragraph 77c)**</p>	<ul style="list-style-type: none"> • Does the term “LULUCF contribution” refer to the application of LULUCF accounting rules and the resulting credits/debits from the sector for achieving NDCs? Or does the term “LULUCF contribution” refer to the total net contribution of the LULUCF sector?
<p>Information consistent with relevant decisions adopted by the CMA on Article 6 (Annex to 18/CMA.1 III.C paragraph 77.d)***:</p> <ul style="list-style-type: none"> • The annual level of anthropogenic emissions by sources and removals by sinks covered by the NDC on an annual basis reported biennially • An emissions balance reflecting the level of anthropogenic emissions by sources and removals by sinks covered by its NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for ITMOs first-transferred/transferred and a subtraction ITMOs used/acquired; • Any other information consistent with decisions adopted by the CMA on reporting under Article 6 • Information on how each cooperative approach promotes sustainable development; and ensures environmental integrity and transparency, including in governance; and applies robust accounting to ensure inter alia the avoidance of double counting 	<ul style="list-style-type: none"> • What level of detail is necessary/desirable in a structured summary? • Where does such information need to be reported (e.g. as part of a Party's reporting under Article 13 of the Paris Agreement, or in any centralised and/or Party tracking or reporting mechanism agreed under Article 6)?

Note: * Required of all Parties; ** Required, with qualifier “where applicable” or “as applicable”;

***Required, for those Parties that participate in cooperative approaches that involve the use of ITMOs towards an NDC under Article 4, or authorizes the use of MO for international mitigation purposes other than achievement of its NDC.

Source: Author, based on (UNFCCC, 2018^[3]) and Table 5 in (Rocha, 2019^[5]);

Table1b. Information and key questions relating to Annex to 18/CMA.1, Section III C, paragraphs 65-76, 78

Informational element under section III.C of the MPGs	Open questions
Information on the indicators, methodologies, accounting approaches and response measures (Annex to 18/CMA.1 III.C paragraphs 65-76, 78)	
Comparison of information for selected indicator between reporting year of implementation period (IP) and reference points (Annex to 18/CMA.1 III.C paragraph 69)*	<ul style="list-style-type: none"> • Can different indicators for implementation and achievement be used, and still meet this requirement? • Could this comparative information be included in the structured summary?
Assessment of achievement based on latest information for each selected indicator (Annex to decision 18/CMA.1 III.C paragraph 70)*	<ul style="list-style-type: none"> • Could the assessment of achievement by a Party be provided in structured summaries?
For the first NDC, information on accounting approach, including on how it is consistent with Article 4, Paras 13 and 14 of the Paris Agreement (Parties may choose to provide information on how it is consistent with guidance on mitigation); for subsequent NDCs, information provided in III.B and C consistent with guidance on mitigation (Annex to decision 18/CMA.1 III.C paras 71,72, decision 4/CMA.1)**	<ul style="list-style-type: none"> • Such information could potentially become cumbersome – how could it be best depicted in a structured summary (e.g. as narrative information in the structured summary or through references to the narrative information in BTRs or elsewhere)?
Definitions needed to understand the NDC, the selected indicators, sectors and categories (if different from national inventories), mitigation co-benefits of adaptation actions and/or economic diversification plans (Annex to decision 18/CMA.1 III.C paragraph 73)*	
Description of methodologies and/or accounting approaches related to targets, baselines and indicators (Annex to decision 18/CMA.1 III.C paragraph 74,75) *	
Information on how each indicator is related to its NDC; Explanation of how the methodology in each reporting year is consistent with the methodology or methodologies used when communicating the NDC; Explanation of methodological inconsistencies with the Party's most recent national inventory report, if applicable; Description of how double counting of net GHG emission reductions has been avoided (Annex to decision 18/CMA.1 III.C paragraph 76) *	
Information necessary to track progress on the implementation and achievement of the domestic policies and measures implemented to address the social and economic consequences of response measures, including: (a) Sectors and activities associated with response measures; (b) Social and economic consequences from the response measures action; (c) Challenges and barriers to address the consequences; (d) Actions to address the consequences (Annex to decision 18/CMA.1 III.C, paragraph 78)***	

Note: * Required of all Parties; ** Required with requested elements ("may choose"); ***Required of Parties with NDCs that consist of mitigation co-benefits resulting from Parties' adaptation actions and/or economic diversification plans consistent with Article 4, paragraph 7

Source: Author, based on (UNFCCC, 2018^[3]) and Table 5 in (Rocha, 2019^[5]).

3 Sticking points and potential areas of work in 2020

Since COP24, Parties have iterated their different views on the range of issues discussed during the negotiations sessions and through submissions to the UNFCCC. This section explores how these different views could potentially influence the way Parties report information on tracking progress.

What constitutes “structure” and how can it be achieved?

The CMA requested SBSTA to develop CTFs for the information on tracking progress, including for the structured summary (decision 18/CMA.1 paragraph 12). Party submissions of views to the UNFCCC on CTF tables for tracking progress show that the large majority of Parties have a similar broad understanding of the structured summary as a CTF, in line with the CMA’s request for SBSTA to develop those CTFs in its decision 18/CMA.1 (UNFCCC, 2018^[3]). Regardless of SBSTA’s mandate from the CMA to develop these CTFs, a small number of Parties have expressed the view that the structure and format of the structured summary could be decided by an individual Party, and the format could be tabular or even narrative. This view is considered by many Parties as being inconsistent with the CMA mandate to develop *common* tabular formats, and is therefore problematic, as it can affect the ability of a structured summary to meet different possible purposes (section 2). For example, given that facilitating the TER is an important driver of having CTFs for the structured summary, different party-determined formats would likely not facilitate the TER. Moreover, CTFs could lead to information being more comparable across Parties making the structured summaries more suitable to inform collective assessments of progress. From a reporting Party’s perspective, providing the information in tabular format is a way to organise the provision of important information, to ensure that reporting is both complete and transparent. Some of this information could potentially be lost or overlooked if it was provided in a narrative format.

The specificity of the information to be provided and the structure to be adopted are at the very core of international discussions under the UNFCCC in the run-up to COP26. One concern with adopting a reporting system mostly or exclusively in tabular format may be that such a system would end up prescribing, not only the form, but also the content of what Parties are to report. On the other hand, a system where Parties may decide on the format/content of information risks not being in line with what is agreed in decision 18/CMA.1 and with the mandate given by the CMA to SBSTA to develop CTFs. Such a system may also fail to promote the level of detail and completeness in the reported information that is needed to promote transparency and comparability – which are useful in order for CTFs to contribute to collective assessments such as the global stocktake. One way this paper furthers discussion on this issue is by exploring how to disentangle form from content in reporting.

Table 2 highlights different views expressed in submissions and/or negotiating rooms regarding the format of “structured summary”. It then evaluates whether those views are consistent with the MPGs and/or CMA’s decision to develop CTFs and the potential advantages and disadvantages of implementing these different levels of reporting via tabular formats.

Table 2. Advantages and disadvantages of different extents of reporting via tabular formats on information on tracking progress towards NDC

Extent of reporting via tabular formats	Consistency with the MPGs and the mandate given by the CMA to SBSTA to develop Common Tabular Formats	Potential advantages	Potential disadvantages
Information to be provided under narrative, tabular or graphical format, determined by the reporting Party	- This proposal is inconsistent with the mandate given by the CMA to SBSTA to develop CTFs to accommodate all NDCs (Annex to 18/CMA.1, §79)	The focus of this paper is on the development of CTFs for tracking progress to accommodate all NDCs, as per MPGs and mandate given by the CMA to SBSTA. This proposal falls therefore outside of the scope of the paper and is not further analysed.	
Small part of the information to be reported in common tabular format, rest to be determined by the reporting Party	-+ This proposal could or could not be consistent with the MPGs, depending on how Parties report. This is because Parties would self-determine the format in which to report large amounts of information, and this could be in line, or not with the MPGs and the mandate given by the CMA to SBSTA to develop CTFs.	One advantage of this proposal could be that Parties would have more discretion on the form and content of information reported	Because this proposal would give Parties significant leeway on what information to report and how, there is a high risk that this proposal would not promote TACCC principles. For example, as Parties would self-determine how/what to report, the information reported could become highly heterogeneous. This would likely make the information less comparable across parties and consistent over time. Moreover, with little reporting guidance, information could become less transparent, which could make the TER more difficult. Moreover, by not providing clear prompts to all Parties, there is a risk that the reporting would be incomplete.
Clear international guidance on what is to be reported under common tabular and narrative formats in BTRs, both formats defined and agreed internationally	+ This proposal could be consistent with the MPGs and the mandate given by the CMA to SBSTA to develop CTFs	Separating reporting of tabular and narrative information could lead to tables that are more comparable and streamlined. By providing clear guidance to Parties on how/what to report, this proposal would likely promote transparency. As all Parties would be using the same system over time, this proposal could also enhance comparability and consistency of information. By providing a complete and common set of clear prompts to Parties, this proposal could promote completeness.	One disadvantage could be that not all information necessary for a complete picture of progress would be included in the same place, rather it could be spread across different sections of the BTR, which could render the review by TERTs more difficult.
All content to be reported in a common tabular format defined and agreed internationally	+ This proposal could be consistent with the MPGs and the mandate given by the CMA to SBSTA to develop CTFs	By providing a complete set of clear prompts to all Parties, a system where Parties would report all the information in a CTF would have the highest likelihood of promoting transparency, completeness, consistency and comparability of information reported.	As some of the information is of more narrative nature (methodologies, descriptions), this proposal could lead to unwieldy tables, which could render the TER of the information cumbersome. This proposal could also discourage Parties from providing the level of detail necessary on those potentially unwieldy aspects, in order to avoid making tables impractical. These disadvantages could be circumvented though e.g. reporting in tables only references to sections in the BTR (or other publicly-available sources in a UN language) containing the more detailed information.

Source: Authors, based on submissions.

Unclassified

Indicators for reporting on progress made in implementing and achieving NDCs

The MPGs state that Parties "shall identify the indicator(s) that it has selected to track progress towards the implementation and achievement of its NDC" and "shall provide the most recent information for each selected indicator identified (...) for each reporting year during the implementation period of the NDC" (Annex to decision 18/CMA.1 III.C paragraph 65). While the large majority of Parties view that indicators used to track progress during the implementation period are to be the same as those used to assess achievement, the view that different indicators could be used for the different timeframes i.e. implementation vs achievement has also been expressed. The latter view is considered by the majority of Parties to be inconsistent with the MPGs, as the indicators are identified by a Party and selected "to track progress towards implementation *and* achievement of its NDC", as opposed to implementation *or* achievement of its NDC.

More specifically, a minority view is that if a Party has a single-year emissions target, that is, a target for emissions to reach a certain level by a target year, then the Party would only need to report on emission-based indicators for their target year, and not during the implementation period. According to this minority view, the Party could also then use different types of tables for reporting on progress made in implementing and progress made in achieving NDCs. As such, the Party could, for example, report on progress of policies and measures during the implementation period, and only report on emissions-related numbers in the target year for assessing achievement.

The large majority of Parties, however, reject this view. First, Parties sustain that in order to comply with the adopted MPGs, indicators need to be directly related to the Party's NDCs and be the same throughout the whole implementation and achievement periods. Second, they argue that in order to meet the mandate given by the CMA to SBSTA to develop a framework for common reporting, Parties would need to adopt one common tabular format as opposed to agreeing on a set of tables from which Parties could pick and choose. Third, if a Party with a single-year emissions target were to report on emissions-based indicators only in the target year then emissions balance (e.g. resulting from the use of ITMOs) could not be accurately accounted for during the implementation period, which would be detrimental for environmental integrity.

How to report very diverse types of information in a consistent manner?

One challenge Parties have been discussing in the most recent negotiations is how the new reporting tables can capture the needed information on all types of NDCs⁴ in a systematic manner. Parties' NDCs have diverse forms and content. Indeed, most current NDCs vary little, if at all, from the Intended Nationally Determined Contributions (INDCs) submitted in the lead up to the UN Climate Change Conference in Paris, in 2015, when little guidance was available on their format and content. Since then, guidance on NDCs has been developed and adopted internationally (UNFCCC, 2018⁽¹⁾), which may lead to more similar NDCs over time. A key challenge for developing a structured summary today is however in ensuring that it adequately accommodates the diverse types of information needed to characterise progress towards the different types of NDCs currently on the table, ensuring all Parties report under the ETF from the beginning. It is important that a CTF strikes a balance between gathering comparable information across Parties, but not to the detriment of the provision of in-depth, detailed/country-specific NDC information, which is necessary to ensure transparent reporting of progress towards different types of NDCs.

⁴ It is important to note that Since the submission of the first round of NDCs, decision 4/CMA.1 was adopted in 2018. Among other things, this decision establishes some common rules for the NDCs themselves.

Different interpretations of Annex to decision 18/CMA.1 III.C, paragraph 79

Paragraph 79 of the Annex to decision 18/CMA.1 III.C states that “each Party shall report the information referred to in paragraphs 65–78 [of the Annex to decision 18/CMA.1 III.C] in a narrative and common tabular format, as applicable. Such common tabular formats should accommodate all types of NDC under Article 4, as appropriate.” As shown in Table 1, the information referred to in paragraphs 65-78 includes information on the quantitative and qualitative indicators that Parties have selected to track progress towards their NDCs, narrative information on methodologies, definitions and on how the selected indicators relate to the Party’s NDC, among others.

The large majority of Parties understand that Annex to decision 18/CMA.1 III.C Paragraph 79 means that information is to be provided largely in a CTF, in line with the mandate given by the CMA to SBSTA to develop CTFs. While the CTFs can cater for different levels of narrative reporting (e.g. detailed narrative information or summary narrative information with references to the relevant sections in the BTR⁵), it is broadly accepted that CTFs will be a core mandatory part of the reporting on information on tracking progress. However, a minority of Parties claim that Annex to decision 18/CMA.1 III.C Paragraph 79 allows for the information on tracking progress to be presented solely in a narrative format and that the use of CTFs would be optional (as also presented in Table 2). This is considered, by the large majority of Parties to be contrary to the MPGs and to the mandate given by the CMA to SBSTA to develop CTFs to be used to report on information on tracking progress under Annex to decision 18/CMA.1 III.C.

Quantitative, qualitative indicators and narrative information

Table 3 examines potentially relevant indicators and information for different types of NDCs that could be reported by Parties in their process of tracking progress towards NDCs. Table 3 shows that, because NDCs vary in their scope and because some Parties may have different types of targets in their NDCs, the potential indicators used to track progress will be different. This means that using the common structured summary may improve comparability of information on progress towards similar types of NDCs. However, a common structured summary does not guarantee that the information reported will be comparable across all Parties. This may have implications for the aggregation of information to the global level in the context of the global stocktake.

While quantitative information and some of the qualitative information (e.g. whether a policy to implement the NDC is “planned”, “agreed” or “implemented”) that could be helpful in tracking progress could be more readily comparable, it may be more difficult to compare narrative information. When comparing narrative information is needed, it is crucial that this is reported in a transparent manner.

⁵ It is important to note that Parties are also to include narrative information in their BTRs; the latter could supplement the information to be provided under Annex to 18/CMA.1 III.C.

Table 3. Potential information needed to track progress towards different types of NDC

NDC type	Examples of NDCs submitted	Potential indicators for tracking progress made in implementing and achieving the NDC under Article 4 of the Paris Agreement
Economy-wide emission absolute mitigation targets (tCO ₂ -eq); Achievement of carbon neutrality	Developed country Parties, Botswana, Brazil, Ethiopia, Republic of the Marshall Islands, Norway, Bhutan (goal to remain carbon neutral)	GHG emissions balance (including contribution from LULUCF sector and the use of cooperative approaches); percentage reduction of emissions in comparison to base year (or base period) for base year and for each year of implementation period and at target year; relevant Article 6 information as applicable and consistently with relevant decisions adopted by the CMA on Article 6
Non-economy-wide emission mitigation targets (tCO ₂ -eq)	Guyana, Liberia	<i>Same as above</i>
Peaking emissions in a given year	China	GHG emissions balance (including contribution from LULUCF sector and the use of cooperative approaches); relevant Article 6 information as applicable and consistently with relevant decisions adopted by the CMA on Article 6.
Economy-wide goals to reduce emissions relative to a BAU baseline (tCO ₂ -eq)	Algeria, Argentina, Bangladesh, Barbados, Côte d'Ivoire, Ecuador, Georgia, Iran, Kiribati, Korea, Mexico, Turkey, Viet Nam	GHG emissions balance (including contribution from LULUCF sector and the use of cooperative approaches); percentage reduction of emissions in comparison to reference emissions for each year of implementation period and at target year; relevant Article 6 information as applicable and consistently with relevant decisions adopted by the CMA on Article 6
Sector-specific goals relative to a BAU baseline (tCO ₂ -eq)	Albania, Kiribati	<i>Same as above</i>
Emissions intensity goals (kgCO ₂ -eq per unit of GDP) Emissions per capita goals (tCO ₂ -eq per cap)	Chile, China, India, Singapore Ghana, Israel, Zimbabwe	Net GHG emissions and removals (including contribution from LULUCF sector), percentage reduction of emissions intensity in comparison to base year for each year of implementation period and at target year updated; GDP and/or population projections if applicable. Relevant Article 6 information as applicable and consistently with relevant decisions adopted by the CMA on Article 6.
Various non-GHG goals, including for non-fossil or renewable energy, energy efficiency, forest cover, etc.	Antigua and Barbuda, China (share of non-fossil energy, forest cover), India (share of non-fossil electricity), Myanmar	Information on chosen indicator on reference point(s), level(s), baseline(s), base year(s) or starting point(s), and during implementation period and at target year;
Implementation of qualitative policies and measures, creation of institutions etc.	Guinea-Bissau, Mozambique, Sierra Leone	Progress made towards milestones, including new institutions
No measurable goals	Pakistan, Egypt	Narrative information on progress

Source: Author, adapted from (Briner and Moarif, 2016^[6])

Note: Since the submission of the first round of NDCs, decision 4/CMA.1 was adopted in 2018. Among other things, this decision, in providing in detail the information to be provided by Parties on clarity, transparency and understanding of NDCs, potentially establishes some common rules for the NDCs themselves.

Information related to cooperative approaches

Some information relating to reporting of the use of cooperative approaches was included in the Annex to decision 18/CMA.1. Paragraph 77.d of this Annex states that “each Party that participates in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards an NDC under Article 4, or authorises the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC shall also provide” information related to Article 6 of the Paris Agreement. Paragraph 77.d sub-paragraphs (i) to (iv) outline information to be provided, and paragraph 77.d(iii) provides for the possibility that there might be other information requirements arising from future decisions adopted by the CMA on Article 6. To date, Parties have not reached consensus on matters relating to Article 6 of the Paris Agreement and paragraphs 36 to 40 of decision 1/CP.21, as reflected in decision 8/CMA.1 (UNFCCC, 2018^[7]), which “notes that information provided in a structured summary referred to in 18/CMA.1, paragraph 77.d is without prejudice to outcomes on these matters”.

Interpretations of this text diverge. Some Parties consider that decision 18/CMA.1 includes an agreement to account for the use of cooperative approaches and that the accounting rules to be agreed will not affect the design of a CTF. Other Parties consider that the information required from Parties on cooperative approaches in the structured summaries or supporting tables cannot be defined before there is agreement on Article 6.

There are some key sticking points in the Article 6 negotiations that have prevented reaching agreement on the framework governing cooperative approaches. Some of these points will affect how a Party's emissions balance is accounted. This can therefore also affect what needs to be reported to assess NDC achievement. Of particular importance here is an agreed way forward on if, when and how to apply corresponding adjustments for international transfers. There are other pending issues relating to Article 6 that could potentially impact reporting in CTFs or supporting tables (if such information is not reported via modalities to be developed under Article 6). These include: whether pre-2021 units, and/or ITMOs from outside a NDC, and/or whether ITMOs not expressed in t CO₂-eq metrics are eligible to be used towards meeting NDC targets. For example, if ITMOs in non-GHG metrics are allowed, or if there is no agreement, then Party reports may need to specify information on any use of pre-2020 units vs use of post-2020 units, any use of units from inside vs outside the NDC scope, and any use of ITMOs measured in different metrics. If very detailed information on the use of cooperative approaches is reported in a CTF rather than elsewhere, this CTF could become long, unwieldy and not always easy to understand (see Annex). It is not yet clear whether this information would be included in reporting under Article 13, i.e. in the BTR, or in a database/registry or other Party reports to be agreed under Article 6 of the Paris Agreement.

4 Common tabular format examples and worked examples

In line with Annex to decision 18/CMA.1 III.C, paragraph 79, this paper explores a potential format for the common structured summary that accommodates for all NDC types as well as very diverse types of information, including quantitative and/or qualitative indicators, as well as narrative information, with appropriate use of notation keys. This exercise is based on the different views expressed by Parties since the UN Climate Change Conference in Katowice (2018), the Paris Agreement and its accompanying decision, the MPGs and other relevant decisions (Paris Agreement, 2015^[2]; UNFCCC, 2016^[4]; UNFCCC, 2018^[3]; UNFCCC, 2018^[1]; UNFCCC, 2019^[8]) The section is divided into: (i) example of table for reporting information on indicators (structured summary CTF I and CTF II) - and (ii) examples of tables for reporting information on the use of cooperative approaches (CTF III). Note that CTF III is an integral part of CTF II for reporting on progress in GHG emissions balance in CTF II and could potentially form a sub-component of CTF II.

Example for reporting information on indicators

This sub-section provides one example each for CTFs I and II for reporting on information related to indicators, focusing on the structured summary. Annex to decision 18/CMA.1 Paragraph 77 states that “each Party shall provide the information referred to” in Section III.C paragraphs 65–76 in a structured summary. As laid out in Table 1, the information required in these paragraphs includes indicators, methodologies and accounting approaches. While paragraph 77 does not indicate exactly what information from Section III.C paragraphs 65–76 is to be included in the structured summary, it provides a minimum set of information to be included in its paragraph sub-items 77.a-d. This sub-section explores an example for the structured summary considering the minimum requirement as outlined in paragraph sub-items 77.a-c (Structured summary CTFs I and II). In addition to this minimum requirement, this example also looks at any other information in Section III.C paragraphs 65–76, which could be usefully included in the structured summary to enhance the level of transparency in reporting, such as the comparison of information for selected indicator between reporting year and reference points, and the assessment of achievement based on latest information for each selected indicator. This sub-section does not develop examples of CTFs for reporting on assumptions, methodologies, accounting approaches and/or response measures.

Table 4: Example for CTFs I and II

This example of a CTF for an individual Party's structured summary is conceptualised with the goal of allowing all Parties, regardless of their NDC type, to report on progress made in implementing and achieving NDCs using the same type of CTF. This part of the structured summary is split in two CTFs:

CTF I: Information on indicators, reference and target levels

	Description	Description of how indicator is related to NDC under Article 4	Reporting year	Indicator type	Unit	Reference type	Reference year/period	Reference level	Target year/period	Target year/period level
Indicator 1										
Indicator 2										
...										

CTF II: Information on progress made in implementing and achieving the NDC

	N*	N+1	N+2	...	T**	Period level (if applicable)***
Information on progress						
Indicator 1						
Indicator 2						
...						
Comparison of information for selected indicator between reporting year of implementation period and reference point						
Indicator 1						
Indicator 2						
...						
Assessment by the Party of achievement of NDC	yes/no	Explanation:				

*N= first year of the implementation period in question

**T = last year of implementation period

*** This value corresponds to the average of emissions over the target period, to be reported by Parties that have included a multi-year target in their NDCs

Table 5: Worked example 1.1 - Hypothetical NDC target: Economy-wide GHG emissions reduction multi-year target of 45% relative to 1990 levels by 2030

This worked example explores the hypothetical reporting, in the year of 2032, of a Party that has put forward a NDC containing a multi-year target to reduce emissions by 45% relative to 1990 levels by 2030. The Party reports on its emissions, including the use of internationally acquired/transferred ITMOs through cooperative approaches, throughout the whole implementation period and target year.

Reporting year: 2032

CTF I: Information on indicators, reference and target levels and supporting information

	Description	Description of how indicator is related to NDC under Article 4	Reporting year	Indicator type	Unit	Reference type	Reference year/period	Reference level	Target year/period	Target year/period level
Total domestic GHG emissions balance in scope of NDC	Total domestic GHG emissions balance, considering the use of units transferred/acquired through international carbon markets	Indicator is expressed in the exact same unit as target in NDC	2032	Quantitative	MtCO ₂ eq	Base Year	1990	5200	2021-2030	3380*

*This value corresponds to the target period average level of emissions, as the NDC contains a multi-year target

CTF II: Information on progress made in implementing and achieving the NDC

	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Period level (if applicable)
Information on progress											
Total domestic GHG emissions balance in scope of NDC (MtCO ₂ eq)	3900	3795	3441	3378	3373	3260	3118	2886	2833	2793	3278
Comparison of information for selected indicator between reporting year of implementation period and reference point											
Percentage reduction of target period average emissions	15.4%	12.3%	1.8%	-0.1%	-0.2%	-3.6%	-7.7%	-14.6%	-16.2%	-17.4%	-3%
Assessment by the Party of achievement of its NDC	Yes	<i>Explanation: The Party has successfully achieved its multi-year target, by achieving an economy-wide reduction of 3% below target period level, which is equivalent to a budget target that achieves 45% below 1990 by 2030.</i>									

Table 6: Worked Example 1.2 - Economy-wide GHG reduction single-year target of 40% relative to 2005 levels by 2025

This worked example explores the hypothetical reporting of a Party that has put forward a NDC containing a single-year target to reduce emissions by 40% relative to 2005 levels by 2025. During the implementation period, the Party provides information on quantitative emissions related indicators alongside a summary of the policies and measures it is implementing to achieve its NDC. The Party is reporting in year 2028 on the implementation period of its first NDC, including assessment of achievement at target year.

CTF I: Information on indicators, reference and target levels

<i>Indicator</i>	<i>Description</i>	<i>Description of how indicator is related to NDC under Article 4</i>	<i>Reporting year</i>	<i>Indicator type</i>	<i>Unit</i>	<i>Reference type</i>	<i>Reference year/period</i>	<i>Reference level</i>	<i>Target year/period</i>	<i>Target year/period level</i>
Plan for low carbon Emissions in Agriculture	The country has been investing in different measures for enhancing sustainability of the agricultural sector for the past two decades. Amongst the policies included in this program are: Agriculture Research, Restoration of grazing land and the biological nitrogen fixation.	The implementation of this policy will contribute to the achievement of the NDC	2028	Qualitative	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Increased support for solar power	In the country's budget proposal for 2021, the Government proposes an increased budget for the support to solar power, to CUR 1000 for the period 2012-2025.	The implementation of this policy will contribute to the achievement of the NDC	2028	Qualitative	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CO ₂ emission regulations for newly registered vehicles*	CO ₂ emission targets for newly registered vehicles in line with new regulations. The target by 2024 for passenger cars (fleet average) has been set at 90 grams of CO ₂ per kilometre, for light commercial vehicles at 150 grams of CO ₂ per kilometre.	The implementation of this policy will contribute to the achievement of the NDC	2028	Qualitative	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Total GHG emissions balance in scope of NDC	Total domestic GHG emissions balance, considering the use of units transferred/acquired through international carbon markets	The NDC target is expressed in terms of GHG emissions	2028	Quantitative	Mt-CO ₂ eq	Base year	2005	2800	2025	1680

CTF II: Information on progress made in implementing and achieving the NDC

	2021	2022	2023	2024	2025	2026	Period level (if applicable)
Information on progress							
Plan for low carbon Emissions in Agriculture	Implemented	Implemented	Implemented	Implemented	Implemented	Implemented	n.a.
Increased support for solar power	Planned	Planned	Implemented	Implemented	Implemented	Implemented	n.a.
CO ₂ emission regulations for newly registered vehicles*	Planned	Planned	Planned	Implemented	Implemented	Implemented	n.a.
Total GHG emissions balance in scope of NDC (Mt-CO ₂ .eq)	2020	1852	1790	1732	1586	1498	n.a.
Comparison of information for selected indicator between reporting year of implementation period and reference point							
Plan for low carbon Emissions in Agriculture	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Increased support for solar power	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CO ₂ emission regulations for newly registered vehicles*	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Percentage reduction of base year emissions	28%	34%	36%	38%	43%	46%	n.a.
Assessment by the Party of achievement of NDC	yes	<i>Explanation: The Party has achieved its NDC target of reducing economy-wide GHG emissions by more than 40% relative to 2005 levels in 2025.</i>					

Table 7: Worked Example 1.3: A list of intended actions without explicit target year

This worked example explores the hypothetical reporting, in the year of 2024, of an Least Developed country (LDC) Party that has put forward a NDC containing a list of intended actions, without making the target year explicit. The Party reports on progress in relation to these actions in a narrative manner only.

CTF I: Information on indicators, reference and target levels and supporting information

<i>Indicator</i>	<i>Description</i>	<i>Description of how indicator is related to NDC under Article 4</i>	<i>Reporting year</i>	<i>Indicator type</i>	<i>Unit</i>	<i>Reference type</i>	<i>Reference year/period</i>	<i>Reference level</i>	<i>Target year/period</i>	<i>Target year/period level</i>
Intended action 1 - Energy efficiency improvement	More efficient use of energy, especially by end users;	The NDC put forward the intention to put in place policies to achieve this improvement	2024	Qualitative	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Intended action 2 - Increase in renewable energy sources	Increased use of renewable energy as an alternative to non-renewable energy sources;	The NDC put forward the intention to put in place policies to achieve this increase	2024	Qualitative	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Intended action 3 - Reform energy subsidies	Energy and fossil fuel subsidies reform;	The NDC put forward the intention to put in place policies allowing for this reform	2024	Qualitative	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

CTF II: Information on progress made in implementing and achieving the NDC

	2021	2022	2023	2024	Period level
Information on progress					
Intended action 1 - Energy efficiency improvement	The country has put in place a task force within the Ministry of Environment to work on an energy efficiency campaign, targeting end users.	The Task force has developed the stages of the campaign, which is to be developed in three main stages: Conceptualisation, implementation, Review of results. The task force kicked off the Conceptualisation phase, with a call for proposals for media/advertising agencies to work closely with Ministry on development of material (further details in section III.2 of BTR, p. 89).	The Task force along with specialised agency have worked together to develop material for the campaign and for monitoring results. Implementation Phase kicked off in November 2023 (further details in section III.2 of BTR, p. 89)	The task Force, along with specialised agencies, worked on developing a series of workshops, targeting different types of stakeholders (industries, commercial business, farms etc.) (further details in section III.2 of BTR, p. 90)	n.a.
Intended action 2 - Increase in renewable energy sources	Establishment of Working Group within Ministry of Energy and Mines to work on a plan for enhancing the use of renewable energy sources (further details in section III.4 of BTR, p. 95).	Working Group developing a plan for enhancing the use of renewable energy sources (further details in section III.4 of BTR, p. 95).	Federal Government has put in place a programme for enhancing the use of renewable energy sources, with the aim to achieve an increase of 15% of use of renewable energy in the energy mix within 13 years (further details in section III.4 of BTR, p. 95).	Federal Government continues to implement a programme for enhancing the use of renewable energy sources, with the aim to achieve an increase of 15% of use of renewable energy in the energy mix within 13 years (further details in section III.4 of BTR, p. 95).	n.a.
Intended action 3 - Reform energy subsidies	Policy on fossil fuel subsidies reform adopted	Implementation of first step of policy package consisting of setting different prices for petroleum products based on energy generation efficiency implemented	Implementation of policy package consisting of providing support to certain sectors to promote switching from conventional energy sources to clean energy sources	Program to monitor the implementation of policy package consisting of providing support to certain sectors to promote switching from conventional energy sources to clean energy sources	n.a.
Comparison of information for selected indicator between reporting year of implementation period and reference point					
Intended action 1 - Energy efficiency improvement	n.a.	n.a.	n.a.	n.a.	n.a.
Intended action 2 - Increase in renewable energy sources	n.a.	n.a.	n.a.	n.a.	n.a.
Intended action 3 - Reform energy subsidies	n.a.	n.a.	n.a.	n.a.	n.a.
Assessment by the Party of achievement of NDC	n.a.	<i>Explanation: n.a.</i>			

Table 8. Assessment of progress table – CTFs I and II

	Assessment	Comment
Suitability for different types of NDCs		
Do CTFs I and II allow for quantitative and/or qualitative indicators and narrative information to be reported?	Yes	CTFs I and II would allow Parties to report on quantitative and qualitative indicators as well as narrative information. While this would allow for Parties with diverse NDCs to report on progress, the information provided by Parties could be very different.
Are CTFs I and II suitable for tracking progress towards different types of NDCs?	Yes	Parties with different types or coverage of NDCs may want to use different types of indicators or information to track progress towards NDCs. CTFs I and II would allow for Parties to report on a wide range of information types, so it is suitable for tracking progress towards different NDCs.
Promotion of TACCC principles		
Do CTFs I and II promote transparency (low, medium, high)?	Low to high: potentially more transparency if quantitative information is provided (as applicable).	The level of transparency achieved will be dependent on what type of information Parties choose to provide. For example, Parties may choose to provide quantitative information to compare indicators in the last year reported and target year, which would lead to high levels of transparency. In contrast, Parties may choose to provide narrative information on assessing their progress towards their target, which could lead to a subjective assessment low in transparency.
Do CTFs I and II promote accuracy (low, medium, high)?	Low to high	CTFs I and II would allow all the information to be provided in one place, which could facilitate Technical Expert Review. The review of the information could therefore help Parties indirectly improve accuracy of the information in future reports.
Do CTFs I and II promote completeness (low, medium, high)?	Medium to high	By providing a consistent and detailed set of prompts to all Parties, CTFs I and II may encourage Parties to provide as much information as possible on their progress towards NDCs. Nevertheless, Parties may still provide the information they deem as necessary, so the format of the CTF alone cannot guarantee completeness.
Do CTFs I and II promote comparability (low, medium, high)?	Low to Medium	Because CTFs I and II would allow Parties to provide very different types of information, the level of comparability achieved will be dependent on what type of information Parties choose to provide. One question however is whether structured summary format can actually reduce the diversity in information on tracking progress, as this diversity in information is a consequence of the diverse forms and coverage of NDCs themselves. The worked examples show that if information is essentially narrative, comparability is reduced. As CTFs I and II would provide the same prompts to all Parties, it could, to the extent possible, promote comparability in the information reported on progress towards similar types of NDCs. However, a common structured summary does not guarantee that the information will be comparable across all Parties.
Do CTFs I and II promote consistency (low, medium, high)?	Medium to high	CTFs I and II would allow Parties to provide the same categories of information using the same prompts over time, which could lead to more consistent information provided by an individual Party over time, than if Parties could report using different prompts in different years.

	Assessment	Comment
Assessing progress made in implementing and achieving NDCs under Article 4		
Do CTFs I and II allow for reporting quantitative, qualitative or narrative information that can be compared with target information (low, medium, high)?	Medium: Yes - if the indicators reported for the implementation period and to assess achievement are the same. No- if Parties choose to use different indicators for tracking implementation and/or achievement.	CTFs I and II include a dedicated area where all Parties can provide a narrative or quantitative assessment of how levels reported compare with target levels. If indicators used to track progress during the implementation do not match directly the nature or typology of the target, then a direct comparison is not possible
Do CTFs I and II allow for reporting quantitative and qualitative indicators and narrative information that can be used to assess whether a country is meeting and/or has met its NDC (low, medium, high)?	Medium: Yes – if Parties use indicators that can directly measure achievement No - if Parties use indicators which do not relate directly to their target	CTF II includes a dedicated area where a Party can provide its assessment of achievement of its NDC target. Similarly to assessment on implementation, if indicator(s) identified by the Party for assessing achievement are directly related to the NDC target, then achievement can be assessed.
Facilitate Technical Expert Review		
Do CTFs I and II facilitate TER (low, medium, high)?	Medium to High	While information provided by Parties may be widely diverse, the fact that all Parties would be using the same tabular format which includes the same prompts, could potentially facilitate the technical review, as all information would be reported in the same place and format.
Inform the global stocktake		
Do CTFs I and II, if adopted, allows the ETF to meet its purpose to “inform the global stocktake under Article 14? (low, medium, high)?	Medium to High	Whether the information reported by Parties can inform a collective assessment of efforts will depend very much on the scope of the assessment itself, which is yet to be agreed. Given the diversity of NDCs, this example provides as high a level of comparability as possible, as all Parties are given the same prompts and all information would be provided in the same place and format. CTFs I and II may improve comparability of information on progress towards similar types of NDCs. However, a they do not guarantee that the information will be comparable across all Parties, which may have implications for the global stocktake.

Source: Authors

Examples for reporting information on the use of cooperative approaches

This section provides examples of how information relating to cooperative approaches can be reported in the structured summary. Annex to decision 18/CMA.1 Paragraph 77.d outlines a series of informational elements relating to cooperative approaches to be reported by Parties who participate in such approaches. These informational elements include e.g. an emissions balance adjusted on the basis of corresponding adjustments undertaken by effecting an addition for ITMOs first-transferred/transferred and a subtraction for ITMOs used/acquired, and information on how each cooperative approach promotes sustainable development, as well as ensures environmental integrity and transparency. Whether all of these elements are to be reported in detail in a tabular format in the structured summary, or whether some of the information would be reported elsewhere (e.g. in narrative format in the BTRs, or in any Party reporting to be developed under Article 6) remains open.

The examples developed in this sub-section explore a variety of different levels of detail of information that can be reported in the portion of the structured summary on cooperative approaches (CTF III), as required under Annex to decision 18/CMA.1 Paragraph 77.d and the mandate given by the CMA to SBSTA to develop CTFs for the structured summary. These examples are non-exhaustive, and highlight the range in complexity and transparency that could be achieved. The simplest example (Example 1) reflects a situation where only summarised information on cooperative approaches is provided.⁶ Example 2 reflects a situation where summary information, as well as total transfers, total acquisitions, and “other” non-specified information is requested. Example 3 requests reporting on summary information, total transfers, total acquisitions, and specific prompts for information on promoting sustainable development, ensuring environmental integrity and transparency, and ensuring the avoidance of double counting. These three examples are accompanied by worked examples, highlighting how the tables could be filled in different situations. The examples are then assessed across several specific criteria. These criteria include whether the example table allows for reporting of quantitative, qualitative and/or narrative information, provides information on the gross and/or net levels of acquisitions/transfers from a Party’s participation in Article 6 activities, and provides information that can be used to assess environmental integrity. This assessment sheds light on to what extent reporting in the different example tables meet the TACCC principles.

It is important to note that the level of detail of information on cooperative approaches required by reporting provisions laid out in Annex to decision 18/CMA.1 Paragraph 77.d may not achieve the level of detail necessary for a complete and robust reporting on the use of cooperative approaches under Article 6. For example, paragraph 77.d does not refer to several open questions under the framework to be developed for Article 6 of the Paris Agreement, e.g. relating to what type of mitigation outcomes can be internationally transferred, as well as when and how to account for “corresponding adjustments”. How these currently open questions are answered will determine how Parties will calculate and report detailed information on cooperative approaches. For example, if the CMA agrees that ITMOs are defined in CO₂-eq metrics, and that transfer of ITMOs is also to be done in these CO₂-eq metrics, then this means that net transfers (and/or acquisitions) of ITMOs can be reported in that metric only. However, if there is agreement that ITMOs can be expressed in other metrics, then it may be that transfers (and/or acquisitions) of ITMOs can be made in non-CO₂-eq as well as CO₂-eq metrics. Thus, in order to ensure transparency, reporting provisions for a situation where multiple metrics for ITMOs are allowed, and where these are to be reported in supporting tables to CTFs, would need to be expanded from a situation where there is only one metric for an ITMO.

In order to illustrate the high level of complexity such accounting processes/rules could take, this paper explores a potential reporting table which could capture higher levels of detail where e.g. a situation where ITMOs in multiple metrics and from inside/outside NDCs can be transferred, and therefore reported (Annex I). In the absence of an agreement to date, corresponding adjustments are assumed to take place in the year in which transfer or acquisition occurs.

⁶ A few Parties are of the opinion that no information would need to be reported on use of cooperative approaches in the structured summary. However, this example is not explored in the paper, as it is not in line with text in adopted decision 18/CMA.1.

Table 9: CTF for the structured summary - CTF III, example 1: Information on GHG emissions – with summary adjustments**CTF III– information on the use of cooperative approaches, example 1**

While paragraph 77.d of the Annex to decision 18/CMA.1 mandates Parties to report on annual level of GHG emissions, it does not specify when corresponding adjustments are made, or that the adjusted GHG emissions for a given year would be reported biennially. Further clarity on this matter may come from decisions adopted by the CMA on Article 6. The CTF example includes a row where Parties can report their emissions balance. In this example, no underlying information (e.g. total levels of ITMOs first transferred, total level of ITMOs used, method to calculate corresponding adjustment) relating to how this emissions balance is calculated is explicitly requested (and thus is not reported). Depending on any agreed framework for Article 6, this may lead to different Parties calculating their emissions balance in a different way (e.g. relating to whether ITMOs are adjusted for each year, or just in the target year). Thus, this example would not provide clarity or transparency as to how each Party has calculated their emissions balance or on the method it has used to make any corresponding adjustments. Unless specific guidance is provided elsewhere on how to calculate an emissions balance, and how to apply corresponding adjustments, this example table is therefore also likely to lead to different countries reporting information calculated in different ways, leading to non-comparable information being reported between Parties. no

GREENHOUSE GASES EMISSIONS BALANCE					
	<i>N</i> *	<i>N</i> +1	<i>N</i> +2	...	<i>T</i> **
Total GHG emissions consistent with the coverage of NDC					
LULUCF contribution***					
Total GHG emissions consistent with the coverage of NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for ITMOs first-transferred/transferred and a subtraction for ITMOs used/acquired****					

*N= first year of the implementation period in question

**T = target year/period

*** For each year of the target period or target year, if not included in the inventory time series of total net GHG emissions and removals, as applicable.

****For Parties that participate in cooperative approaches that involve the use of ITMOs towards an NDC under Article 4, or authorises the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC.

Table 10: CTF for the structured summary - CTF III, example 1 - Worked example 1

This worked example highlights potential reporting from country C. Party C uses cooperative approaches and has a multi-year NDC ending in N+5 and is reporting in N+8 (to year N+6).

Reporting year: N+8

GREENHOUSE GASES EMISSIONS BALANCE						
	N*	N+1	N+5	N+6
Total GHG emissions consistent with the coverage of NDC	100	100	100	100	100	102
LULUCF contribution**	2	-2	-4	-4	3	3
Total GHG emissions consistent with the coverage of NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for ITMOs first-transferred/transferred and a subtraction for ITMOs used/acquired***	100	100	99	99	94	92

*N= first year of the implementation period in question

** For each year of the target period or target year, if not included in the inventory time series of total net GHG emissions and removals, as applicable.

***For Parties that participate in cooperative approaches that involve the use of ITMOs towards an NDC under Article 4, or authorises the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC.

Table 11: CTF for the structured summary - CTF III, example 1 - Worked example 2

This worked example highlights potential reporting from country D. Party D uses cooperative approaches and has a single-year NDC ending in N+10 and is reporting in N+12 (to year N+10).

Reporting year: N+12

GREENHOUSE GASES EMISSIONS BALANCE						
	N*	N+1	...	N+5	N+6...	N+10
Total GHG emissions consistent with the coverage of NDC	100	100	100	100	102	106
LULUCF contribution**	NE	NE	NE	NE	NE	5
Total GHG emissions consistent with the coverage of NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for ITMOs first-transferred/transferred and a subtraction for ITMOs used/acquired***	100	100	99	94	106	112

*N= first year of the implementation period in question

** For each year of the target period or target year, if not included in the inventory time series of total net GHG emissions and removals, as applicable.

***For Parties that participate in cooperative approaches that involve the use of ITMOs towards an NDC under Article 4, or authorises the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC.

Table 12. Summary assessment structured summary – CTF III, example 1

Does this example:	Assessment	Comment
Allow for narrative and quantitative information to be reported?	No	Only quantitative information is reported.
Highlight the annual level of anthropogenic emissions by sources and removals by sinks covered by the NDC?	Yes	This table would provide for both the total domestic GHG emissions consistent with NDC coverage, and the adjusted GHG emissions consistent with NDC coverage as adjusted to take participation in cooperative approaches into account.
Show if a country is participating in Article 6 activities?	Yes (implicit)	Readers will be able to identify if a country has net transfers or acquisitions from Article 6 by comparing the value in the first row with the value in the row in the table that adjusts GHG emissions on the basis of corresponding adjustments
Provide information on the gross and/or net levels of acquisitions/transfers from a Party's participation in Article 6 activities?	No (can be assessed implicitly)	This information is useful to ensure transparency. This example table would not explicitly provide transparent information on a Party's participation in Article 6 activities, although this could be assessed implicitly.
Provide quantitative information, e.g. an emissions balance, on the country's level of emissions adjusted for participation in Article 6 activities?	Possibly	This table would provide quantitative information on total level of adjusted emissions, but would not provide sufficient detail to ensure that this summary quantitative information is transparent, consistent and complete (for an individual Party) or comparable across different Parties. Furthermore, such a table would allow for a quantitative tracking of progress if the only use of ITMOs was for the purposes of meeting NDCs. If a Party used Article 6 for other purposes, this would not be identified explicitly.
Provide information to assess whether/to what extent, ITMOs are being used for non-NDC purposes?	No	Without this information, there is a risk that double-counting could occur (e.g. with a ITMO being used by a country towards its NDC, and also by an airline to meet its CORSIA target) unless there is a detailed tracking of ITMO uses elsewhere (e.g. in the BTRs, or via any Party reporting to the UNFCCC or under Article 6, or via any centralised tracking mechanism to be developed).
Provide information to explain any difference between the annual level of a Party's transfer/acquisition of and use of ITMOs.	No	To improve transparency of the impact of Article 6 transfers on environmental integrity, it could be useful to have quantitative and qualitative information that could be used to explain any difference between e.g. a country's acquisition and use (such as cancellation) of ITMOs.
Provide information that can be used to assess the environmental integrity implications of a country's participation in Article 6?	No	This information would be needed in case the provisions to be agreed under Article 6 allow for activities or accounting practices that may have a range of implications on environmental integrity. For example, without details on if a country is participating in Article 6, to what extent, what metrics are used for any international exchanges, their source (e.g. inside/outside NDC), their use (e.g. retirement, cancellation, use for non-NDC purposes), how and when corresponding adjustments are made, vintage of transfers, how ITMOs not in CO ₂ -eq metrics are translated to CO ₂ -eq for the purposes of providing an emissions balance etc it is not possible to assess that any transfers under Article 6 do not harm environmental integrity. An alternative to providing detailed information would be if Party reporting indicates that it follows specific eligibility or accounting practices as laid out publicly elsewhere (e.g. a Party's BTR, NC, governing principles of carbon clubs such as the San Jose Principles).
Provide space to accommodate potential other information that could be requested by the CMA on Article 6?	No	Specific row(s) and/or prompts would need to be included to allow for complete and consistent reporting other information over time for a given Party, and reporting that is comparable between different Parties.

Table 13: CTF for the structured summary - CTF III, example 2: Information on GHG emissions – with aggregate ITMO additions and subtractions, summary adjustments and “other” information

CTF III – information on the use of cooperative approaches, example 2

Example 2 highlights total GHG emissions consistent with the coverage of the NDC, LULUCF contribution if not included in the inventory, the total (aggregated) level of additions and total (aggregated) level of subtractions for each reporting year, and the emissions balance. However, the table does not explicitly prompt Parties to be fully transparent about how they have calculated the aggregated level of additions, aggregated level of subtractions and the emissions balance. This example table allows Parties to provide “other” information, but does not specifically prompt Parties to provide narrative or other information on specific issues, e.g. how the use of cooperative approaches promotes sustainable development and ensures environmental integrity and transparency. Unless specific guidance is provided elsewhere on how to apply corresponding adjustments, this table would lead to reported information not being transparent. This example table is also likely to lead to different countries reporting information calculated in different ways, and also to different levels of reporting of “other information”, leading to information being non-comparable between Parties.

GREENHOUSE GAS EMISSIONS BALANCE					
	N*	N+1	T**
Total GHG emissions consistent with the coverage of NDC					
LULUCF contribution***					
Addition for ITMOs first transferred/transferred					
Subtraction for ITMOs used/acquired					
Total GHG emissions consistent with the coverage of NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for ITMOs first-transferred/transferred and a subtraction for ITMOs used/acquired****					
Other information					

*N= first year of the implementation period in question

**T = target year/period

*** For each year of the target period or target year, If not included in the inventory time series of total net GHG emissions and removals, as applicable.

****For Parties that participate in cooperative approaches that involve the use of ITMOs towards an NDC under Article 4, or that authorise the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC.

Table 14: CTF for the structured summary - CTF III, example 2 - Worked example 1

This example highlights potential reporting in year N+8 for country C (which has a multi-year target ending at N+5), and which both acquires and transfers ITMOs during the reporting period.

Reporting year: N+8

GREENHOUSE GAS EMISSIONS BALANCE					
	N*	N+1	...	N+5	N+6
Total GHG emissions consistent with the coverage of NDC	100	100	100	100	102
LULUCF contribution**	2	-2	-4	3	-1
Addition for ITMOs first transferred/transferred	3	0	0	3	0
Subtraction for ITMOs used/acquired	3	0	1	9	4
Total GHG emissions consistent with the coverage of NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for ITMOs first-transferred/transferred and a subtraction for ITMOs used/acquired***	100	100	99	94	98
Other information	Our use of cooperative approaches promotes sustainable development. For example, ITMOs are only sourced from activities that the host country explicitly indicates contribute to their sustainable development priorities. Further information is included in (e.g. reference to BTR, National Communication, public website where information is presented in an official UN language)		See footnote x	See footnote y	The government has decided that our Party's use of cooperative approaches will from now on be governed by the following principles (provide link or reference to a source available in an official UN language), which ensure environmental integrity and promote sustainable development.

*N= first year of the implementation period in question

** For each year of the target period or target year, If not included in the inventory time series of total net GHG emissions and removals, as applicable.

***For Parties that participate in cooperative approaches that involve the use of ITMOs towards an NDC under Article 4, or that authorise the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC.

x Depending on CMA guidance on Article 6, the content of this footnote could vary widely, but could include some qualitative information. For example, depending on the eligibility and accounting provisions agreed for Article 6, this footnote could provide information (potentially supplemented with quantitative details) on the vintage of international transfers/acquisitions, on whether transfers came from inside or outside NDCs, whether acquisitions were used for the purposes of meeting an NDC or for other purposes, information on use of ITMOs etc...

y Total transferred in year N+1 was 4 ITMOs, including 1 with a vintage of 2018 that will be used to meet the current NDC, 1 from outside the NDC of country X, 1 which was subsequently retired, 1 with a vintage of 2021 which will be used towards meeting the current NDC. (Authors' note: the content of this footnote will be influenced by the content of any agreement reached that governs Article 6).

Table 15: CTF for the structured summary - CTF III, example 2 - Worked example 2

This example highlights potential reporting in year N+12 for country D which has a single year target in N+10), and which both acquires and transfers ITMOs during the reporting period.

Reporting year: N+12

GREENHOUSE GAS EMISSIONS BALANCE							
	N*	N+1	...	N+5	N+6	...	N+10
Total GHG emissions consistent with the coverage of NDC)	100	100	100	100	102		106
LULUCF contribution**	NE	NE	NE	NE	2		5
Addition for ITMOs first transferred/transferred	3	0	0	3	0		6
Subtraction for ITMOs used/acquired	3	0	1	9	4		0
Total GHG emissions consistent with the coverage of NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for ITMOs first-transferred/transferred and a subtraction for ITMOs used/acquired***	100	100	99	94	98		112
Other information	Country D has developed X number of policies and measures in order to achieve its NDC. Further information about these are available in (e.g. provide reference to BTR, NC etc.).	Country D has implemented 1 of the X policies and measures (Country D to provide information on or reference to this PAM), is planning to implement a further PAM during the course of the year, and is in the process of developing X-2 further PAMs.	3, see footnote z				

*N= first year of the implementation period in question

** For each year of the target period or target year, If not included in the inventory time series of total net GHG emissions and removals, as applicable.

***For Parties that participate in cooperative approaches that involve the use of ITMOs towards an NDC under Article 4, or that authorise the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC.

z Total transferred in year N+1 was 3 ITMOs, including 2 from outside the NDC of country X, 1 with a vintage of 2021 which will be used towards meeting the current NDC.

Table 16: Summary assessment structured summary – CTF III, example 2

Does this example:	Assessment	Comment
Allow for narrative and quantitative information to be reported?	Yes	The “other information” cells, and ability to provide footnotes that explain these cells, allow for both qualitative and quantitative information to be presented.
Highlight the annual level of anthropogenic emissions by sources and removals by sinks covered by the NDC?	Yes	This table would provide for both the total domestic GHG emissions consistent with NDC coverage, and the adjusted GHG emissions consistent with NDC coverage as adjusted to take participation in cooperative approaches into account. The “other” information in the table may (or not) provide further details on the use of cooperative approaches.
Show if a country is participating in Article 6 activities?	Yes (explicit)	This table explicitly highlights aggregate levels of first transfers/transfers as well as aggregate levels of acquisitions/use (but without distinguishing between first transfers and subsequent transfers, nor between acquisitions and use).
Provide information on the gross and/or net levels of acquisitions/transfers from a country's participation in Article 6 activities?	Yes (aggregate levels)	This information helps to improve the transparency of information presented. However, without separating information on e.g. levels of acquisitions from levels of use, and without providing information on the method used to carry out corresponding adjustments, the information reported in such a table will not be fully transparent for an individual Party and may not be comparable across Parties.
Provide quantitative information, e.g. an emissions balance, on the country's level of emissions adjusted for participation in Article 6 activities?	Yes	This table would provide quantitative information on total level of adjusted emissions, but would not provide sufficient detail to ensure that this summary quantitative information is completely transparent (see above), unless further information were provided e.g. in footnotes to the table.
Provide information to assess whether/to what extent, ITMOs are being used for non-NDC purposes?	No	Without this information, there is a risk that double-counting could occur (e.g. with a ITMO being used by a country towards meeting its NDC, and by an airline to meet its CORSIA target) unless there is a detailed tracking of ITMO uses elsewhere (e.g. via any Party reporting under Article 6, an Article 6.4 registry, and/or a database to track uses of ITMOs).
Provide information to explain any difference between the annual level of a country's transfer/acquisition of and use of ITMOs.	No	This table leaves a lot of leeway for Parties on what they can report under “other” information. Depending on what exactly is reported indirectly, e.g. via references or footnotes to where further details can be found, the table may be used to report information on differences between the acquisition and use of ITMOs. However, this is not specifically prompted. To improve transparency of the impact of Article 6 transfers on environmental integrity, it could be useful to have quantitative and qualitative information that could be used to explain any difference between e.g. a country's acquisition and use (such as cancellation) of ITMOs.
Provide information that can be used to assess the environmental integrity implications of a country's participation in Article 6?	Potentially (depending on whether reporting Party pro-actively includes this information that has not been specifically prompted.)	This information would be needed in case the eligibility or accounting provisions to be agreed under Article 6 allow for activities or accounting practices that may have a range of implications on environmental integrity. For example, without details on if a country is participating in Article 6, to what extent, what metrics are used for any international exchanges, their source (e.g. inside/outside NDC), their use (e.g. retirement, cancellation, use for non-NDC purposes), how and when corresponding adjustments are made, vintage of transfers, how ITMOs not in CO ₂ -eq metrics are translated to CO ₂ -eq for the purposes of providing an emissions balance etc it is not possible to assess that any transfers under Article 6 do not harm environmental integrity. An alternative to providing detailed information would be if Party reporting indicates that it follows specific eligibility or accounting practices as laid out publicly elsewhere (e.g. a Party's BTR, NC, governing principles of carbon clubs such as the San Jose Principles).
Provide space to accommodate potential other information that could be requested by the CMA on Article 6?	Potentially	Without specific prompting in a CTF, it is unclear whether information needed to assess issues such as those mentioned in paragraph 77.diii and 77.div of the MPGs will be reported.

Table 17: CTF for the structured summary - CTF III, example 3: Information on GHG emissions – with summary adjustments and details for “other” information

CTF III – information on the use of cooperative approaches, example 3

Example 3 highlights total GHG emissions consistent with the coverage of the NDC, LULUCF emissions if not included in the NDC, the total (aggregate) level of additions and total (aggregate) level of subtractions for each reporting year, and the emissions balance. However, the table does not explicitly prompt Parties to be transparent about how they have calculated the emissions balance (e.g. if/when corresponding adjustments made, vintage of ITMOs, if ITMOs of non-CO₂ metrics or outside NDC scope were transferred or acquired), or about how they have estimated the total (aggregate) level of additions and subtractions. (It is not yet clear where such detailed information will be reported – and it may be outside the CTF, e.g. under any Party reporting under Article 6, or a centralised tracking mechanism). This example table allows Parties to provide “other” information and includes specific prompts Parties to provide narrative or other information on individual issues, e.g. how the use of cooperative approaches promotes sustainable development and ensures environmental integrity and transparency. If this information does not change e.g. over the NDC implementation period or over the reporting period, reporting could be more streamlined if this narrative information was reported adjacent to, but not in, a tabular format.

GREENHOUSE GAS EMISSIONS BALANCE					
	N*	N+1	T**
Total GHG emissions consistent with the coverage of NDC					
LULUCF contribution***					
Addition for ITMOs first transferred/transferred					
Subtraction for ITMOs used/acquired					
Total GHG emissions consistent with the coverage of NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for ITMOs first-transferred/transferred and a subtraction for ITMOs used/acquired****					
Other information relating to calculation of emissions balance, e.g. method(s) used to calculate corresponding adjustment					
Other information relating to how the use of cooperative approaches promotes sustainable development					
Other information relating to how the use of cooperative approaches ensures environmental integrity, including in governance					
Other information relating to how the use of cooperative approaches ensures transparency, including in governance					
Other information relating to how the use of cooperative approaches applies robust accounting to ensure inter alia the avoidance of double counting, consistent with adopted decisions by the CMA on Article 6					

*N= first year of the implementation period in question

**T = target year/period

***For each year of the target period or target year, If not included in the inventory time series of total net GHG emissions and removals, as applicable.

****For Parties that participate in cooperative approaches that involve the use of ITMOs towards an NDC under Article 4, or that authorise the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC.

Table 18: CTF for the structured summary - CTF III, example 3 - Worked example 1

This example highlights potential reporting in year N+8 for country C (which has a multi-year target ending at N+5), and which both acquires and transfers ITMOs during the reporting period.

Reporting year: N+8

GREENHOUSE GAS EMISSIONS BALANCE					
	N*	N+1	...	N+5	N+6
Total GHG emissions consistent with the coverage of NDC	100	100	100	100	102
LULUCF contribution**	2	-2	-4	3	-1
Addition for ITMOs first transferred/transferred	3	0	0	3	0
Subtraction for ITMOs used/acquired	3	0	1	9	4
Total GHG emissions consistent with the coverage of NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for ITMOs first-transferred/transferred and a subtraction for ITMOs used/acquired***	100	100	99	94	
Other information relating to calculation of emissions balance, e.g. method(s) used to calculate corresponding adjustment					
Other information relating to how the use of cooperative approaches promotes sustainable development	Our use of cooperative approaches promotes sustainable development. For example, ITMOs are only sourced from activities that the host country explicitly indicates contribute to their sustainable development priorities. Further information is included in (e.g. reference to BTR, National Communication, public website where information is presented in an official UN language)	See footnote x	See footnote y	The government has decided that our Party's use of cooperative approaches will from now on be governed by the following principles (provide link or reference to a source available in an official UN language), which promote sustainable development.	
Other information relating to how the use of cooperative approaches ensures environmental integrity, including in governance	[The information reported here could include information relating to national criteria, processes or systems implemented by the Party to ensure environmental integrity of ITMOs generated/transferred/acquired, or it could indicate where further information on this topic could be found, e.g. as listed above]			(Individual columns may be needed to highlight if the approach and systems used change over time within the reporting Party)	
Other information relating to how the use of cooperative approaches ensures transparency, including in governance	[The information reported here could include information relating to national processes or systems implemented by the Party to ensure environmental integrity of ITMOs generated/transferred/acquired, or it could indicate where further information on this topic could be found, e.g. as listed above]			(Individual columns may be needed to highlight if the approach and systems used change over time within the reporting Party)	
Other information relating to how the use of cooperative approaches applies robust accounting to ensure inter alia the avoidance of double counting, consistent with adopted decisions by the CMA on Article 6	[The information reported here could include information relating to national processes or systems implemented by the Party to ensure environmental integrity of ITMOs generated/transferred/acquired, or it could indicate where further information on this topic could be found, e.g. as listed above]			(Individual columns may be needed to highlight if the approach and systems used change over time within the reporting Party)	

*N= first year of the implementation period in question

** For each year of the target period or target year, If not included in the inventory time series of total net GHG emissions and removals, as applicable.

***For Parties that participate in cooperative approaches that involve the use of ITMOs towards an NDC under Article 4, or that authorise the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC. While paragraph 77.d of the MPGs (which may be superseded) mandates Parties to report on annual level of GHG emissions, it does not specify when corresponding adjustments are made, or that the adjusted GHG emissions would be reported on an annual basis. This table presents one possible way to report the adjusted GHG emissions. Further clarity on this matter may come from decisions adopted by the CMA on Article 6. A footnote could be added encouraging countries to report the method they use to undertake corresponding adjustments.

x Depending on CMA guidance on Article 6, the content of this footnote could vary widely, but could include some qualitative information. For example, depending on the eligibility and accounting provisions agreed for Article 6, this footnote could provide information (potentially supplemented with quantitative details) on the vintage of international transfers/acquisitions, on whether transfers came from inside or outside NDCs, whether acquisitions were used for the purposes of meeting an NDC or for other purposes, information on use of ITMOs etc...

y Total transferred in year N+1 was 4 ITMOs, including 1 with a vintage of 2018 that will be used to meet the current NDC, 1 from outside the NDC of country X, 1 which was subsequently retired, 1 with a vintage of 2021 which will be used towards meeting the current NDC. (Authors' note: the content of this footnote will be influenced by the content of any agreement reached that governs Article 6).

Table 19. Summary assessment structured summary – CTF III, example 3

Does this example:	Assessment	Comment
Allow for narrative and quantitative information to be reported?	Yes	The “other information” cells, and ability to provide footnotes that explain these cells, allow for both qualitative and quantitative information to be presented.
Highlight the annual level of anthropogenic emissions by sources and removals by sinks covered by the NDC.	Yes	This table would provide for both the total domestic GHG emissions consistent with NDC coverage, and the adjusted GHG emissions consistent with NDC coverage as adjusted to take participation in cooperative approaches into account. The “other” information in the table may (or not) provide further details on the use of cooperative approaches.
Show if a country is participating in Article 6 activities?	Yes (explicit)	This table explicitly highlights aggregate levels of first transfers/transfers as well as aggregate levels of acquisitions/use (but without distinguishing between first transfers and subsequent transfers, nor between acquisitions and use) . .
Provide information on the gross and/or net levels of acquisitions/transfers from a country's participation in Article 6 activities?	Yes (aggregate levels)	This information helps to improve the transparency of information presented. However, without separating information on e.g. levels of acquisitions from levels of use, and without providing information on the method used to carry out corresponding adjustments, the information reported in such a table will not be fully transparent for an individual Party and may not be comparable across Parties.
Provide quantitative information, e.g. an emissions balance, on the country's level of emissions adjusted for participation in Article 6 activities?	Yes	This table would provide quantitative information on total level of adjusted emissions, but would not provide sufficient detail to ensure that this summary quantitative information is completely transparent (see above), unless further information were provided elsewhere in the table e.g. in footnotes.
Provide information to assess whether/to what extent, ITMOs are being used for non-NDC purposes?	Not explicitly	This information could potentially be included in the reporting table footnotes. Without this information, there is a risk that double-counting could occur (e.g. with a ITMO being used by country C towards its NDC, and by an airline to meet its CORSIA target) unless there is a detailed tracking of ITMO uses elsewhere (e.g. via any Party reporting under Article 6, an Article 6.4 registry, and/or a database to track uses of ITMOs).
Provide information to explain any difference between the annual level of a country's transfer/acquisition of and use of ITMOs .	No	This table leaves a lot of leeway for Parties on what they can report under “other” information. Depending on what exactly is reported indirectly, e.g. via references or footnotes to where further details can be found, the table may be used to report information on differences between the acquisition and use of ITMOs. However, this is not specifically prompted. To improve transparency of the impact of Article 6 transfers on environmental integrity, it could be useful to have quantitative and qualitative information that could be used to explain any difference between e.g. a country's acquisition and use (such as cancellation) of ITMOs.
Provide information that can be used to assess the environmental integrity implications of a country's participation in Article 6?	Probably (depending on what exactly the reporting Party includes under the specific prompts)	This information would be needed in case the provisions to be agreed under Article 6 allow for activities or accounting practices have a range of implications on environmental integrity. For example, without details on, what metrics are used for ITMOs, the source of ITMOs (e.g. inside/outside NDC), their use (e.g. retirement, cancellation, use for non-NDC purposes), how and when corresponding adjustments are made, vintage of transfers, how ITMOs not in CO ₂ -eq metrics are translated to CO ₂ -eq for the purposes of providing an emissions balance etc it is not possible to assess that any transfers under Article 6 do not harm environmental integrity. An alternative to providing detailed information would be if Party reporting indicates that it follows specific eligibility or accounting practices as laid out publicly elsewhere (e.g. a Party's BTR, NC, governing principles of carbon clubs such as the San Jose Principles).
Provide space to accommodate potential other information that could be requested by the CMA on Article 6?	Potentially	Without specific prompting in a CTF, it is unclear whether information needed to assess issues such as those mentioned in paragraph 77.diii of the Annex to Decision 18/CMA.1 will be reported.

Conclusions

The Modalities, Procedures and Guidelines (MPGs) were adopted in decision 18/CMA.1 by the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) in its first session in 2018 in Katowice (UNFCCC, 2018^[3]). The Annex to the decision 18/CMA.1 defines the set of rules for reporting and review of information submitted by Parties under the Enhanced Transparency Framework (ETF) of the Paris Agreement. According to this Annex, Parties are to provide a “structured summary” to track progress made in implementing and achieving their Nationally Determined Contribution (NDC) under Article 4 of the Paris Agreement (Annex to decision 18/CMA.1, Section III.C paragraph 77). The CMA has requested the Subsidiary Body for Scientific and Technological Advice (SBSTA) to develop “common tabular formats” (CTFs) for the reporting of information on tracking progress, including for the structured summary. Agreement on CTFs is due by CMA3 (Glasgow, now deferred to 2021). Reaching agreement could be challenging as negotiations under SBSTA as part of CMA2 (Madrid, December 2019) were unable to reach consensus on progress to date in this and other related areas.

Parties have been negotiating CTFs since the adoption of the decision 18/CMA.1 at the United Nations (UN) Climate Change Conference in Katowice, in 2018. These discussions include the content and format of the “structured summary”. The Annex to decision 18/CMA.1 indicates that such a summary is to include the information on indicators that Parties identify for tracking progress towards their NDCs, and the information associated with these indicators on e.g. assumptions, relevance to the NDC and underlying methodologies. Such information can include quantitative indicators (e.g. GHG emission levels) and/or qualitative indicators (e.g. whether a policy or measure is planned, approved, implemented). This information can also be narrative (e.g. a description of a policy and measure, information on how use of a specific cooperative approach under Article 6 of the Paris Agreement promotes sustainable development).

The purpose(s) of reporting on progress will influence the content and format of information that needs to be reported in a structured summary. These purposes include those focused on promoting transparency and mutual trust (e.g. providing clear understanding of climate change action amongst Parties), those focused on collective processes (such as the global stocktake), and those facilitating specific processes under the Paris Agreement (such as facilitating the Technical Expert Review (TER) or improved reporting over time). A structured summary CTF containing clear prompts to all Parties would help fulfil all of these purposes. Firstly, clear prompts can encourage Parties to report the needed information and could therefore help improve transparency, completeness, and consistency in reporting over time. Further, if all Parties use the same prompts in their structured summary, this could help to improve the comparability of different Parties’ reports, and thus their ability to inform the global stocktake. Finally, a complete and clearly-organised presentation of information in a tabular format based on clear prompts could facilitate the TER of Party reports. From a reporting Party’s perspective, providing the information in tabular format is a way to ensure important information is not lost or overlooked, which is more likely to happen if Parties were to report in a narrative format.

The goal of this paper is to further the discussions on the format and potential content of CTFs for the structured summary. One key characteristic of the structured summary is that, in line with paragraph 79 of the Annex to decision 18/CMA.1, it accommodates all types of NDCs and therefore very diverse types of

information. Such CTFs would thus provide sufficient leeway for Parties with different types of NDCs to be able to show progress with implementation and achievement. This paper explores different possible structures of CTFs for the structured summary for reporting on tracking progress towards NDCs. In doing so, it considers the wide range of views put forward by Parties, the Paris Agreement and its accompanying decision, the decision 18/CMA.1 and other relevant decisions (Paris Agreement, 2015^[2]; UNFCCC, 2016^[4]; UNFCCC, 2018^[3]; UNFCCC, 2018^[1]; UNFCCC, 2019^[8]).

Section III.C of the Annex to decision 18/CMA.1 provides a detailed list of the informational elements to be reported by Parties when tracking progress made in implementing and achieving NDCs. Parties have agreed that indicators used for tracking progress may be either quantitative or qualitative, are to be identified by the reporting Party and are to be relevant to the Party's NDC (Annex to decision 18/CMA.1, Section III.C, paragraph 65). In addition, Parties engaging in cooperative approaches are to report on information related to ITMOs for Parties (Annex to decision 18/CMA.1 III.C paragraph 77.d). The structured summary developed in this paper is made up of three common CTFs. These contain: (i) information on description of indicators, reference and target levels (CTF I); (ii) information on progress made in implementing and achieving NDCs (CTF II) and (iii) information on the use of cooperative approaches (CTF III), the latter being needed for calculating GHG emissions balances to be reported in CTF II and potentially forming a sub-component of CTF II.

This paper has developed examples for all three CTFs. The paper developed one example each for CTFs I and II, on information on the description of indicators, reference and target levels and on progress, respectively. The paper then explored worked examples for three different types of NDCs. In order to have a structured summary for reporting towards all types of NDCs, this paper finds that the CTFs need to provide Parties with sufficient leeway to report on their chosen indicators of progress. This can be achieved by developing row and column headings that allow cells to be filled with quantitative and/or, qualitative indicators and narrative information, as applicable to and as consistent with the NDC (if not applicable, Parties can indicate that by a notation key e.g. "not estimated" or "not applicable" in the relevant cells). If filled with narrative information, and in order to render the table as straightforward as possible, Parties could be encouraged to report summaries and/or references to their BTR (or other publicly available document in a UN language) that contains the relevant information in detail.

A tabular format can therefore be developed in such a way as to allow each Party – irrespective of the type of its NDC - to report on progress towards that NDC in a complete and transparent manner, and consistently over time. Moreover, in providing the same prompts to all Parties, such a table could facilitate the review of information by TERTs, as all the relevant information would be reported in a single section of the Biennial Transparency Report (BTR), rather than dispersed throughout it. Nevertheless, including significant levels of narrative information (i.e. beyond cross-references to other documents) into a CTF could lead to unwieldy and cumbersome tables. Tables can be particularly unwieldy if Parties report narrative information at a relatively disaggregated level (e.g. on individual policies and measures, unless the NDC is also expressed in such terms). The paper concludes that, wherever possible, reporting on qualitative indicators, as opposed to on narrative information, could be beneficial as they can describe progress more transparently than narrative information.

The worked examples also show that the information provided in the example CTFs developed could become quite diverse, as indicators relevant to one NDC may not be relevant to another. This means that a common structure for a summary, organised in a tabular format, in line with the MPGs and the mandate given by the CM to SBSTA to develop CTFs, may improve comparability of information on progress towards similar NDCs. However, a common structure would not guarantee that the information reported will be comparable across all Parties. This potential non-comparability may have implications for the aggregation of information to the global level in the context of the global stocktake. This paper concludes, however, that consistently using a common structure for a summary may facilitate improved reporting over time, as Parties gain experience with the reporting format.

This paper also established examples for CTFs that could be used for reporting information on the use of cooperative approaches (CA) under Article 6 of the Paris Agreement. Reporting such information is, however, not straightforward in the absence of an agreed framework for Article 6. This is because there are still many open questions relating to this framework (e.g. what an ITMO is, and how and when to apply corresponding adjustments), and the answers to these questions may impact what would need to be reported to ensure that reporting meets the TACCC principles and other agreed criteria. The examples developed for this paper illustrate CTFs covering a range of different implications in terms of length, complexity and transparency (Table 20), but do not include all possible combinations.

Table 20. Summary assessment of different example CTFs on reporting the use of cooperative approaches

	Example 1: (summary adjustments for CA)	Example 2: (aggregate ITMO additions and subtractions, summary adjustments, leeway to report “other” information)	Example 3: (summary adjustments, acquisitions, transfers, details for “other” information)
Allow for narrative and quantitative information to be reported	No	Yes	Yes
Highlight annual level of anthropogenic emissions/removals covered by NDC	Yes	Yes	Yes
Show if a Party is participating in Article 6 activities	Yes (implicit)	Yes (explicit)	Yes (explicit)
Provide information on the gross and/or net levels of acquisitions/transfers	No (but can be assessed implicitly)	Potentially (depending on level of detail reported)	Yes (aggregate levels)
Provide an emissions balance	Yes, but limited transparency	Yes, but limited transparency	Yes
Provide information on non-NDC uses of ITMOs	No	Not explicitly	Not explicitly
Provide information to explain any difference between annual level of transfers/acquisitions and use of ITMOs	No	No	No
Provide information that can be used to assess environmental integrity implications	No	Not explicitly (but Parties have the leeway to report some or all information under “other”)	Possibly (this information is explicitly asked for, but without further prompts reporting by different countries is unlikely to be comparable and may also not be complete)
Provide information on sustainable development and accounting	No	Not explicitly (but Parties have the leeway to report some or all information under “other”)	Possibly (this information is explicitly asked for, but without further prompts reporting by different countries is unlikely to be comparable and may also not be complete)

Source: Authors

Table 20 highlights a positive correlation between the level of detail provided, and the level of transparency achieved. However, it also highlights that significantly more detail may need to be reported on the use of cooperative approaches than is suggested in table CTF III. Such detail would be needed in order for reporting on this topic to meet the TACCC principles; to demonstrate the impact of the use of cooperative approaches on sustainable development, environmental integrity, transparency; and that it applies robust accounting to avoid double counting. This information could be reported via different channels including BTRs, other reports under Article 13, Party reporting under Article 6, or other reporting provisions currently under discussion for cooperative approaches.

The example tables developed for reporting on the use of cooperative approaches also vary in the extent to which they allow for narrative reporting, e.g. in relation to how each cooperative approach used promotes

sustainable development and ensures environmental integrity. Nevertheless, including significant levels of narrative information on cooperative approaches could make tabular formats both unwieldy and less comparable between countries on those more narrative aspects.

The example tables for reporting on the use of cooperative approaches (“CTF III”) have highlighted the difficulty for Parties in reporting an emissions balance and in assessing achievement with a quantitative NDC expressed in t-CO₂eq in the absence of agreed accounting rules under Article 6. In addition, this exercise has also highlighted the importance of robust reporting of information relating to the use of cooperative approaches (e.g. via Party reporting under Article 6 or other reporting or tracking provisions to be agreed under Article 6) – including between different implementation periods. Robust tracking of Parties’ use of cooperative approaches will be needed in order to ensure the avoidance of double counting and to assess the impact of the use of cooperative approaches on environmental integrity. This could be particularly important if any framework for Article 6 allows Parties to transfer ITMOs for a previous implementation period without requiring Parties to recalculate and report their amended emissions balance and to re-assess the impact of any such transfers on an assessment of achieving their NDC. The examples have also highlighted the importance of reporting time series of information on the use of cooperative approaches (as there could be a significant time lag between acquiring and using an ITMO).

Summary findings

This paper concludes that CTFs for reporting information on progress towards NDCs (including summary information on the use of cooperative approaches) in a structured summary can be constructed in such a way as to enable the reporting of quantitative and/or qualitative indicators and narrative information. The possibility of reporting all three types of information in a structured summary will be necessary to assess progress made in implementing and achieving a diversity of NDCs. A significant level of quantitative information may also need to be reported to ensure that reporting on the use of cooperative approaches is transparent, complete, consistent and comparable. Further, a significant level of narrative information on the use of cooperative approaches may also need to be reported, i.a. to highlight how a Party’s use of cooperative approaches promotes sustainable development, ensures environmental integrity, and applies robust accounting to avoid double counting. Nevertheless, the more narrative information that is reported in a CTF, the more cumbersome and the less comparable such a CTF becomes. This paper finds that unwieldy CTFs could impact the level of transparency achieved as well as the comparability of information reported across Parties.

If a purpose of CTFs was also to track the detailed use of ITMOs (e.g. voluntary cancellation by governments, or for the purposes of overall mitigation in global emissions), then this could add further complexity to reporting. A potential way forward could be to report detailed information on the use of cooperative approaches elsewhere, e.g. via “supporting tables” to the CTFs, via Party reporting under Article 6, or via another tracking and/or reporting system to be developed under Article 6. This would make the CTFs for tracking progress more transparent and less unwieldy.

Moreover, this paper concludes that it would facilitate transparency to report information on progress in implementation and achievement of NDCs in CTFs in a single section of the BTR, rather than have that information dispersed throughout it. CTFs can be structured to provide all Parties with the same prompts for reporting on progress towards NDCs. Using CTFs could therefore help improve consistency and comparability of information reported and could also encourage more complete reporting over time, therefore improving the reporting and review system under the ETF as well as potentially facilitating the contribution of the ETF to the global stocktake.

Annex I.

Table 21. A1: Detailed information on cooperative approaches - worked example a: Information on GHG emissions – with detailed information and worked example for country C with a multi-year target ending at N+4 (or T) at 125 (metrics), increasing linearly from 100 (metrics) at year N***

This example highlights reporting in year N+8 for country C with a multi-year target of 125 (metrics) ending at N+4, increasing linearly from 100 (metrics) at year N*. Country C's domestic emissions grow at a slow rate, and it transfers ITMOs throughout the implementation period, both from inside and outside the scope of its NDC, and in CO₂-eq metrics as well as other metrics. At the end of the implementation period, the assessment of whether country C meets its NDC target depends on how ITMOs transferred outside the scope of a NDC are counted. In the first year of the 2nd implementation period i.e. N2*, country C transfers ITMOs with vintages from both the first and second implementation period (although the table does not specify how many of each vintage – if needed, this would need to be reported elsewhere, or tracked via another means, e.g. a mechanism registry). The table contains a row highlighting if a country has acquired ITMOs but not used them. Clarity would be needed regarding whether such information is best reported at an annual level (in ^{which} case, a potentially long time series of information would need to be reported), or whether at a cumulative level. For example, if a country acquired but did not use 1 ITMO in year N* and acquired but did not use 2 ITMOs in year N+1, would the figure reported under N+1 be 2 (annual figure), or 2+1 (to highlight 3 ITMOs in total not (yet) used)? Neither would indicate explicitly any level of voluntary cancellations, though – if this information is needed, it could be reported in a separate row. This example table is likely to provide the greatest level of transparency and comparability between different Party reports. However, further detail, e.g. on the source of ITMOs (e.g. whether from a KP mechanism); how corresponding adjustments were made; information on vintages of ITMOs transferred or acquired, use of ITMOs, how a party is avoiding double counting etc would need to be reported in order to generate a comprehensive picture of the environmental integrity implications of participation in Article 6, any contribution to OMGE etc.

Reporting year: N+8 (country C)

GREENHOUSE GAS EMISSIONS BALANCE					
	<i>N*</i>	<i>N+1</i>	...	<i>T**</i>	<i>N2*</i>
Total GHG emissions consistent with the coverage of NDC (<i>country C</i>)	100	102	107	110	110
LULUCF contribution**	2	-2	-4	3	3
Addition for ITMOs transferred (t CO ₂ -eq)	2	3	14	14	14
<i>Indication if/how many transferred ITMOs with in t CO₂-eq metrics are from outside the coverage of the NDC (if allowed by CMA decisions)</i>	0	0	0	4	0
Vintage of ITMOs transferred in t CO ₂ -eq	2022, 2023	2023	2024	<i>N*</i>	2024, 2026
Addition for ITMOs transferred (other metrics, e.g. kWh renewable electricity generated) ¹	2	2	0	0	4
<i>Indication if/how many transferred ITMOs in other metrics e.g. kWh are from outside the coverage of the NDC (if allowed by CMA decisions)</i>	0	0	n/a	n/a	0
Vintage(s) of ITMOs transferred in other metric 1	2021, 2022	2021, 2022	n/a	n/a	2024
Addition for ITMOs transferred (other metrics, e.g. energy savings in toe or kWh) ²	4	4	16	20	0
<i>Indication if/how many transferred ITMOs with ITMOs in other metrics e.g. toe or kWh of energy savings are from outside the coverage of the NDC (if allowed by CMA decisions)</i>	0	0	0	0	0
Vintage(s) of ITMOs transferred in other metric 2	2021	2022	2022,2023	2024, <i>N*</i>	0
Total addition for ITMOS transferred (t CO₂-eq) [>optional]	4	4	18	19 (or 15), depending on how ITMOs outside NDCs are counted	16
Subtraction for ITMOs used (t CO ₂ -eq)	0	0	0	0	0
Vintage of ITMOs used (t CO ₂ -eq)	0	0	0	0	0
Subtraction for ITMOs used (other metrics, e.g. energy efficiency certificates) (<i>if allowed by CMA decisions</i>)	0	0	0	0	0
Vintage of ITMOs used (other metrics)	0	0	0	0	0
For information: ITMOs acquired (t CO ₂ -eq) but not used for the purposes of meeting the NDC	0	0	0	0	0

Of which: ITMOs acquired (t CO ₂ -eq) and used from outside a NDC (if allowed by CMA decisions)	0	0	0	0	0
For information: ITMOs acquired (t CO ₂ -eq) but not yet used	0	0	0	0	0
For information: ITMOs acquired (other metrics) but not used for the purposes of meeting the NDC	0	0	0	0	0
Of which: ITMOs acquired (other metrics) from outside a NDC but not yet used for the purposes of meeting the NDC	0	0	0	0	0
For information: ITMOs acquired (other metrics) but not yet used	0	0	0	0	0
Total subtraction for ITMOS acquired (t CO₂-eq) [>optional]	0	0	0	0	0
Total GHG emissions consistent with the coverage of NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for ITMOs first-transferred/transferred and a subtraction for ITMOs used/acquired***	100	104	125	125 or 129 (depending on how ITMOs generated outside NDCs are counted)	126
Other information (e.g. method used for corresponding adjustments)	See footnote x		4y		
Cooperative approach used	A6.2, A6.4, CORSIA	A6.4, CORSIA, other (provide name)	A6.4, A6.2, CORSIA	A6.4, A6.2	A6.4, A6.2
How each cooperative approach promotes sustainable development	Qualitative/narrative information for each cooperative approach used either in this specific year, or during the implementation period of the NDC, or for use towards meeting this NDC (e.g. potentially from a true-up period after the implementation period from the NDC is over), potentially for each country from which a ITMO has been transferred or acquired	(e.g.) Further information on promotion of sustainable development in country X, Y, Z can be found in the project design documents on the acquiring country website (give address), chapter X of the BTR etc.			
How each cooperative approach ensures environmental integrity, including in governance	Qualitative/narrative information (could potentially be merged with the row above, and/or could also include links to methods, definitions etc. used) as reported either in the BTR, PDD, information on acquiring country website (give link)				
How each cooperative approach ensures transparency, including in governance	The Party has set up a system to track ITMOs of different metrics that are acquired or transferred. Those that are in metrics other than t CO ₂ -eq are converted to t CO ₂ -eq at the corresponding value in the host or acquiring country, whichever is lower, as per guidance agreed by (e.g. CMA, certification body etc)..	As for previous year	As for previous year		
How each cooperative approach applies robust accounting	Qualitative/narrative information, with potential references to accounting rules used (if outside UNFCCC framework), e.g. use of San Jose principles, or specific mention of vintage of ITMOs used, whether coming from KP activities etc.	See footnote a (vintages of ITMOs), See footnote b (timing of corresponding adjustment, if flexibility in this under CMA decisions) See footnote c (use or not of KP units, if			

		allowed by CMA)			
Other information	0	Some of the ITMOs acquired in this year will be used for compliance with NDC at year N+10	3z		

*N= first year of the implementation period in question

** For each year of the target period or target year, If not included in the inventory time series of total net GHG emissions and removals, as applicable.

***For Parties that participate in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards an NDC under Article 4, or authorises the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC. While paragraph 77.d of the MPGs (which may be superseded) mandates Parties to report on annual level of GHG emissions, it does not specify when corresponding adjustments are made, or that the adjusted GHG emissions would be reported on an annual basis. This table presents one possible way to report the adjusted GHG emissions. Further clarity on this matter may come from decisions adopted by the CMA on Article 6.

x Depending on CMA guidance on Article 6, the content of this footnote could vary widely, but is likely to include some qualitative information. For example, his footnote could provide information (potentially supplemented with quantitative details) on the vintage of international transfers/acquisitions, on whether transfers came from inside or outside NDCs, whether acquisitions were used for the purposes of meeting an NDC or for other purposes, information on voluntary cancellation or retirement etc...

y Total transferred in year N+1 was 4 ITMOs, including 1 with a vintage of 2018 that will be used to meet the current NDC, 1 from outside the NDC of country X, 1 which was subsequently retired, 1 with a vintage of 2021 which will be used towards meeting the current NDC.

z Total transferred in year N+1 was 3 ITMOs, including 2 from outside the NDC of country X, 1 with a vintage of 2021 which will be used towards meeting the current NDC.

1 Footnote to outline how the non-GHG metric was "translated" to GHG metrics. E.g. 1 kWh renewable electricity generated was calculated as being equivalent to 0.5 kg CO₂-eq

2 Footnote to outline how the non-GHG metric was "translated" to GHG metrics. E.g. 1 energy efficiency certificate was calculated as being equivalent to 0.25 kg CO₂-eq

3 Footnote to outline how the non-GHG metric was "translated" to GHG metrics. E.g. 1 kWh renewable electricity transferred by generating country A was calculated as being equivalent to 0.25 kg CO₂-eq, 1 kWh renewable electricity transferred by generating country B was calculated as being equivalent to 0.75 kg CO₂-eq.

Table 22. A2: Detailed information on cooperative approaches - worked example b - Information on GHG emissions – with detailed information and worked example for country D with a single year target of 130 (units) ending at N+9

This example highlights reporting for country D that has a single year target of 130 (metric) in year N+9 (e.g. 2030, shown as T**). Reporting is done in year N+13 (2033), up to 2031 which is shown as N2*. In this example, country D transfers (i.e. sells) ITMOs to multiple countries, in multiple ITMOs (t CO₂-eq, kWh of renewable energy, energy efficiency certificates), and from multiple vintages – except in its target year, when it acquires ITMOs. This example raises multiple issues, including: reporting is unwieldy, environmental integrity could be damaged by allowing acquisition and transfers of ITMOs in non-target years, that whole time-series would need to be recalculated and reported to ensure that acquisition or transfer of ITMOs were appropriately accounted. This example also shows that such a reporting table is not transparent; in order to calculate an emissions balance, the conversion factors between non-CO₂-eq metric and CO₂-eq is needed. These conversion factors would need to be developed and agreed for each metric, and may vary by country, over time, and potentially by individual activity. For the purposes of illustration, only one conversion factor is shown for a given non-CO₂-eq metric. To promote transparency, information on conversion factors would need to be reported as footnotes, in the table (e.g. under “other”), or by providing a reference to a source in a UN official language that is publicly available. The table also highlights the possible confusion by having LULUCF removals shown as a negative number (either with “-” or in brackets, as per inventory reporting), but “subtractions” for ITMOs used expressed as a positive integer. This example table is likely to provide the greatest level of transparency and comparability between different Party reports. However, further detail, e.g. on the source of ITMOs (e.g. whether from a KP mechanism); how corresponding adjustments were made; information on vintages of ITMOs transferred or acquired, use of ITMOs, how a party is avoiding double counting etc. would need to be reported in order to generate a comprehensive picture of the environmental integrity implications of participation in Article 6, any contribution to OMGE etc..

Reporting year: N+13 (country D)

GREENHOUSE GAS EMISSIONS BALANCE							
	N*	N+1	...	N+5	...	T**	N2*
Total GHG emissions consistent with the coverage of NDC (country D)	100	100	110	120	135	150	150
LULUCF contribution** - example country D with single-year target ending at N+10	2	-2	-4	3	1	2	-1
Addition for ITMOs transferred (t CO ₂ -eq)	2	2	14	15	16	0	15
- Indication if/how many transferred ITMOs in t CO ₂ -eq are from outside the coverage of the NDC (if allowed by CMA decisions)	1	0	10	10	10	0	10
Vintage of ITMOs transferred in t CO ₂ -eq	2022, 2023	2022	2022	2023	2023, 2024	n/a	N+5
Addition for ITMOs transferred (other metrics, e.g. kWh renewable electricity generated) ¹	2	2	10	10	10	0	10
Indication if/how many transferred ITMOs in other metrics e.g. kWh are from outside the coverage of the NDC (if allowed by CMA decisions)	n/a	n/a	0	0	0	n/a	0
Vintage(s) of ITMOs transferred in other metric 1	2021, 2022	2021, 2022	2022	2023	2023, 2024	n/a	N+3
Addition for ITMOs transferred (other metrics, e.g. energy efficiency certificates) ²	4	4	16	20	28	0	20
Indication if/how many transferred ITMOs in other metrics e.g. energy efficiency certificates are from outside the coverage of the NDC (if allowed by CMA decisions)	0	0	0	0	0	n/a	0
Vintage(s) of ITMOs transferred in other metric 2	2021	2022	2023	2024	N*	n/a	N+5
Total addition for ITMOs transferred (t CO₂-eq) [optional]	3	4	23	25	28	0	25
Total ITMOs acquired (t CO ₂ -eq)	2	2	2	2	0	2	2
Subtraction for ITMOs used (t CO ₂ -eq)	0	0	0	0	0	10	0
Vintage of ITMOs acquired (t CO ₂ -eq)	2019 [if allowed by CMA decisions], 2021	2021	2021, 2022	2023	n/a	2025	2023
Vintage of ITMOs used (t CO ₂ -eq)	n/a	n/a	n/a	n/a	n/a	2019-2025	0
For information: ITMOs acquired (t CO ₂ -eq) but not used for the purposes of meeting the NDC	0	0	0	0	0	0	2

For information: ITMOs acquired (t CO ₂ -eq) and used from outside a NDC (if allowed by CMA decisions)	0	2	2	1	0	0	2
ITMOs acquired, metric 1 e.g. kWh (if allowed by CMA decisions)	0	4	4	4	4	4	4
ITMOs used, metric 1 e.g. kWh (if allowed by CMA decisions)	0	0	0	0	0	16	0
ITMOs acquired, metric 2 e.g. energy efficiency certificate (if allowed by CMA decisions)	2	8	8	8	10	12	10
ITMOs used, metric 2 e.g. energy efficiency certificate (if allowed by CMA decisions)	0	0	0	0	0	48	0
Subtraction for ITMOs used (other metrics, e.g. energy efficiency certificates) (if allowed by CMA decisions)	0	0	0	0	0	20	0
Vintage of ITMOs used (other metrics)	2021, 2022	2021,2022	2022, 2023	2023	2025	2028	n/a
For information: ITMOs acquired (other metrics) but not used for the purposes of meeting the NDC (annual values)	2 (metric 2)	4 (metric 1), 8 (metric 2)	4 (metric 1), 8 (metric 2)	4 (metric 1), 8 (metric 2)	4 (metric 1), 10 (metric 2)	4 (metric 2)	4 (metric 1), 10 (metric 2)
Of which: ITMOs acquired (other metrics) from outside a NDC (if allowed by CMA decisions) but not yet used for the purposes of meeting the NDC	0	0	0	0	0	0	0
For information: ITMOs acquired (other metrics) but not yet used	0	0	0	0	0	0	0
Total subtraction for ITMOS acquired and used (t CO₂-eq) [>optional]	0	0	0	0	0	0	0
Total GHG emissions consistent with the coverage of NDC adjusted on the basis of corresponding adjustments undertaken by effecting an addition for ITMOs first-transferred/transferred and a subtraction for ITMOs used/acquired***	100	104	133 (or 123), depending on how ITMOs outside NDCs are counted	145 (or 135) depending on how ITMOs outside NDCs are counted	163 (or 153) depending on how ITMOs outside NDCs are counted	130	175
Other information, e.g. method used for corresponding adjustments, information on the use of cooperative approaches	See footnote x		4y				
Cooperative approach used	A6.2, A6.4, CORSIA	A6.4, CORSIA, other (provide name)	CORSIA	A6.2	A6.2, A6.4	A6.2, A6.4	A6.2, A6.4

How each cooperative approach promotes sustainable development	Qualitative/narrative information for each cooperative approach used either in this specific year, or during the implementation period of the NDC, or for use towards meeting this NDC (e.g. potentially from a true-up period after the implementation period from the NDC is over), potentially for each country from which a ITMO has been transferred or acquired	(e.g.) Further information on promotion of sustainable development in country X, Y, Z can be found in the project design documents on specific website (give address), chapter X of the BTR etc.	As for previous year	As for previous year	As for previous year	The Party has established a national process (see BTR section XX for more details) outlining the steps taken to ensure that activities generating ITMOs also lead to wider sustainable development benefits.	
How each cooperative approach ensures environmental integrity, including in governance	Qualitative/narrative information (could potentially be merged with the row above, and/or could also include links to methods, definitions etc. used) as reported either in the BTR, PDD, information on acquiring country website (give link)	As for previous year	As for previous year	As for previous year	As for previous year	No ITMOs are transferred out of the country in the target year, to insure that the emissions target is met	
How each cooperative approach ensures transparency, including in governance	Qualitative/narrative information that could potentially be included only once per cooperative approach per implementation period (assuming that the rules governing each cooperative approach do not change during a NDC implementation period)	As for previous year	As for previous year				
How each cooperative approach applies robust accounting	Qualitative/narrative information, with potential references to accounting rules used (if outside UNFCCC framework), e.g. use of San Jose principles, or specific mention of vintage of ITMOs used, whether coming from KP activities etc.	See footnote a (vintages of ITMOs), See footnote b (timing of corresponding adjustment, if flexibility in this under CMA decisions) See footnote c	As for previous year	As for previous year	As for previous year	As for previous year	As for previous year

		(use or not of KP units, if allowed by CMA)					
Other information	n/a	The units acquired in this year will be used for compliance with NDC at year N+10	n/a	The ITMOs acquired in this year will be used for compliance with NDC at year N+10	The ITMOs acquired in this year will be used for compliance with NDC at year N+10		The ITMOs acquired in this year will be used for compliance with 2 nd NDC at year N2 [*] +10

*N= first year of the implementation period in question

** For each year of the target period or target year, If not included in the inventory time series of total net GHG emissions and removals, as applicable.

***For Parties that participate in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards an NDC under Article 4, or authorises the use of mitigation outcomes for international mitigation purposes other than achievement of its NDC. While paragraph 77.d of the MPGs (which may be superseded) mandates Parties to report on annual level of GHG emissions, it does not specify when corresponding adjustments are made, or that the adjusted GHG emissions would be reported on an annual basis. This table presents one possible way to report the adjusted GHG emissions. Further clarity on this matter may come from decisions adopted by the CMA on Article 6.

x Depending on CMA guidance on Article 6, the content of this footnote could vary widely, but is likely to include some qualitative information. For example, this footnote could provide information on the use of ITMOs, information on or reference to the method used to calculate corresponding adjustments, whether acquisitions were used for the purposes of meeting an NDC or for other purposes, information on voluntary cancellation or retirement etc...

y Total transferred in year N+1 was 4 units, including 1 with a vintage of 2018 that will be used to meet the current NDC, 1 from outside the NDC of country X, 1 which was subsequently retired, 1 with a vintage of 2021 which will be used towards meeting the current NDC.

z Total transferred in year N+1 was 3 ITMOs, including 2 from outside the NDC of country X, 1 with a vintage of 2021 which will be used towards meeting the current NDC.

1 Footnote to outline how the non-GHG metric was “translated” to GHG metrics. E.g. 1 kWh renewable electricity generated was calculated as being equivalent to 0.5 kg CO₂-eq

2 Footnote to outline how the non-GHG metric was “translated” to GHG metrics. E.g. 1 energy efficiency certificate was calculated as being equivalent to 0.25 kg CO₂-eq

3 Footnote to outline how the non-GHG metric was “translated” to GHG metrics. E.g. 1 kWh renewable electricity transferred by generating country A was calculated as being equivalent to 0.25 kg CO₂-eq,

1 kWh renewable electricity transferred by generating country B was calculated as being equivalent to 0.75 kg CO₂-eq.

Table 23. Summary assessment – Cooperative Approaches table example 4

Does this example:	Assessment	Comment
Allow for narrative as well as quantitative information to be reported?	Yes	The “other information” cells, and ability to provide footnotes that explain these cells, allow for both narrative and quantitative information to be presented.
Highlight the annual level of anthropogenic emissions by sources and removals by sinks covered by the NDC.	Yes	This table provides detailed information that could allow the annual level of emissions to be calculated for a variety of different accounting rules.
Show if a country is participating in Article 6 activities?	Yes (explicit)	Readers will be able to identify if a country has transfers or acquisitions from Article 6, and of different metrics. The table also provides for reporting of a number of options currently open under Article 6 negotiations (e.g. whether ITMOs can be in non-CO ₂ -metrics). This will allow for accounting of a Party’s net emissions balance to be reconstructed if accounting rules are agreed subsequently.
Provide information on the gross and/or net levels of acquisitions/transfers from a country’s participation in Article 6 activities?	Yes	Information on total gross and net inflows and outflows is useful to ensure transparency. This table is lengthy in order to improve transparency on the type, source, units, vintage etc of ITMOs. It would be even longer if information on transfers/acquisitions of ITMOs (and associated vintages) needed to be reported separately for each Party where a transfer had been made from/to.
Provide quantitative information, e.g. an emissions balance, on the country’s level of emissions adjusted for participation in Article 6 activities?	Yes	This table would provide quantitative information on total level of adjusted emissions, and would also provide detail to ensure that this summary quantitative information is transparent.
Provide information to assess whether/to what extent, ITMOs are from outside the NDC and/or being used for non-NDC purposes?	Yes	The table explicitly requests information on international transfers from outside the NDC, and on information on ITMOs acquired and not used for the purposes of meeting the NDC vs acquired and not yet used.
Provide information to explain any difference between the annual level of a country’s transfer/acquisition of and use of ITMOs.	Yes	Quantitative information on ITMOs acquired but not yet used, or not used for the purposes of the NDC can be used to explain this difference. This table also provides leeway for Parties to provide narrative explanations under “other”.
Provide information that can be used to assess the environmental integrity implications of a country’s participation in Article 6?	Yes (many but not all aspects)	The information in this table provides a large volume of detail that can be used to assess environmental integrity (e.g. vintage of ITMOs and conversion factors for non-CO ₂ e.q. ITMOs, whether ITMOs transferred and acquired are from outside NDCs). Further detail, e.g. on the source of ITMOs (e.g. whether from a KP mechanism), details of or reference to methods for corresponding adjustments, further information on vintages of ITMOs transferred or acquired, use of ITMOs, how a party is avoiding double counting etc would need to be reported in order to generate a comprehensive picture of the environmental integrity implications of participation in Article 6, any contribution to OMGE etc..
Provide other information consistent with reporting arrangements for Article 6 as agreed by CMA?	Yes (for items currently covered in paragraph 77.di, ii and iv)	This example provides explicit prompts for information that can be used to assess a Party’s emissions balance, the environmental integrity of participation in cooperative approaches, and impact on sustainable development.

References

- Briner, G. and S. Moarif (2016), “Unpacking Provisions Related to Transparency of Mitigation and Support in the Paris Agreement”, *OECD/IEA Climate Change Expert Group Papers*, Vol. No. 2016/02, <http://dx.doi.org/10.1787/5jlww004n6nq-en>. [6]
- Paris Agreement (2015), *15 December 2015*, United Nations Treaty Collection Certified True Copies (CTCs) of Multilateral Treaties Deposited with the Secretary-General Chapter XXVII.7.d, https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27 (accessed on 28 April 2020). [2]
- Rocha, M. (2019), *Reporting Tables – potential areas of work under SBSTA and options: GHG inventories and Tracking Progress towards NDCs*. [5]
- UNFCCC (2019), *Decision 9/CMA.2 - Matters relating to Article 6 of the Paris Agreement. FCCC/PA/CMA/2019/6/Add.1*, https://unfccc.int/sites/default/files/resource/cma2019_06_add.01_.pdf (accessed on 12 May 2020). [8]
- UNFCCC (2018), *Decision 18/CMA.1. Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement. FCCC/PA/CMA/2018/3/Add.2*, https://unfccc.int/sites/default/files/resource/CMA2018_03a02E.pdf (accessed on 28 April 2020). [3]
- UNFCCC (2018), *Decision 4/CMA.1 Further guidance in relation to the mitigation section of decision 1/CP.21. FCCC/PA/CMA/2018/3/Add.1*, https://unfccc.int/sites/default/files/resource/cma2018_03a01E.pdf (accessed on 28 April 2020). [1]
- UNFCCC (2018), *Decision 8/CMA.1: Matters relating to Article 6 of the Paris Agreement and paragraphs 36–40 of decision 1/CP.21. FCCC/PA/CMA/2018/3/Add.1*, https://unfccc.int/sites/default/files/resource/cma2018_03a01E.pdf (accessed on 27 January 2020). [7]
- UNFCCC (2016), *Decision 1/CP.21 Adoption of the Paris Agreement, Report of the Conference of the Parties on its twenty-first session, held in Paris from 30 November to 13 December 2015*, UNFCCC Secretariat, Bonn, <https://unfccc.int/resource/docs/2015/cop21/eng/10a01.pdf>. [4]

www.oecd.org/environment/cc/ccxg.htm

www.iea.org



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