Reporting adaptation through the biennial transparency report: A practical explanation of the guidance

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A practical explanation of the guidance
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Disclaimer

This document is intended to provide practitioners and technical experts with an understanding of what producing an A-BTR will involve in practice. In providing this understanding, this document makes an attempt to interpret the guidance for the A-BTR provided by the annex to decision 18/CMA.1, as well as relevant aspects of other UNFCCC decisions, agreements, and publications. However, while the interpretation is based upon a range of UNFCCC outputs, it must be stressed that the information provided by this document represents the interpretation of the authors and thus, does not necessarily reflect the official views of the UNFCCC.
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List of acronyms:

A-BTR – Adaptation section of the Biennial Transparency Report
BR – Biennial Report
BTR – Biennial Transparency Report
BUR – Biennial Update Report
CMA – Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
COP – Conference of Parties
ETF – Enhanced Transparency Framework
FMCP – Facilitative Multilateral Consideration of Progress
LDCs – Least Developed Countries
MPGs – Modalities, Procedures and Guidelines
M&E – Monitoring and Evaluation
NAP – National Adaptation Plan
NDC – Nationally Determined Contributions
NGO – Non-Governmental Organisation
NIR – National Inventory Report
SIDS – Small Island Developing States
TER – Technical Expert Review
UNFCCC – United Nations Framework Convention for Climate Change

Glossary of key terms:

**Adaptation action:** Used in this document as a catch-all term for adaptation interventions and measures of all varieties, including mainstreaming of adaptation into other processes, institutional capacity building, and the formulation of adaptation strategies and programmes.

**Indicator:** Measurable characteristic or variable which helps to describe a situation that exists and to track changes or trends over a period of time (Hammill et al., 2014).

**Modalities, procedures and guidelines (MPGs):** Refers to the guidance provided by the United Nations Framework Convention on Climate Change (UNFCCC) for the reporting instruments and review mechanisms that form the Paris Agreement’s Enhanced Transparency Framework (ETF), including the biennial transparency report and its adaptation section. The modalities, procedures and guidelines are provided in the annex of CMA decision 18/CMA.1.

**Monitoring and evaluation (M&E) system:** Refers to all the indicators, tools, and processes used to measure how a project, programme, or process has been implemented and assess the results it is having.

**National monitoring and evaluation system:** A monitoring and evaluation system that combines findings from a series of assessments at lower units of analysis (e.g. at project, sectoral, district-levels) to achieve a national-level understanding of a situation (Hammill et al., 2014).
Who is this document for?
This document is targeted towards practitioners and technical experts who will be responsible for producing the adaptation section of their country’s Biennial Transparency Report (BTR).

Why read this document?
The primary aim of this document is to provide its target audience with a thorough understanding of what the task of producing a BTR’s Adaptation Section (from hereon in referred to as A-BTR) will involve, as per the guidance provided under the UNFCCC.

To a certain extent, guidance provided under the UNFCCC should already provide practitioners and technical experts responsible for producing their country’s A-BTR with the instructions they need to execute this task. However, upon reading the guidance it becomes apparent that its formulation is not always clear and can, at times, leave important questions open, including:

• What information is intended to be included in an A-BTR?
• What information should be prioritised for inclusion? and,
• How should the intended contents of the report link with other communications and reports submitted by countries under the UNFCCC?

Given these limitations to the utility of the UNFCCC guidance, this document provides an expanded and more tangible explanation of the UNFCCC’s guidance for the A-BTR. In addition, the document will also provide readers with a broader understanding of the intended and potential features and functions of the A-BTR, as well as its wider role in the system for communicating and reporting on adaptation that has evolved under the UNFCCC.

Document structure
This document is structured into three sections:

Section one provides an overview of how countries communicate and report on adaptation under the Paris Agreement. Within this overview, the section introduces the premise for communicating and reporting on adaptation under the UNFCCC, provides an overview of the system for communicating and reporting on adaptation developed under the Paris Agreement, and presents the key instruments and mechanisms that form this system.

Following this, section two aims to provide readers with an overview and understanding of the aims and intended functions of the A-BTR. To do this, the section outlines what reporting through the A-BTR is intended to achieve, presents how countries could approach the task of reporting adaptation through the A-BTR in lieu of its aims, and finally, describes how countries could also use the instrument to highlight specific aspects of their national adaptation process or their national situation.

Finally, section three provides readers with a practical and more tangible explanation of the UNFCCC’s guidance for the A-BTR. To do this, the section first provides readers with an overview of the UNFCCC’s guidance for the A-BTR, outlining the scope of the information that could be included in the chapter. Following this, it presents a detailed section-by-section explanation of what information the guidance is asking countries to provide, the significance of providing this information, and under what format the information may be included in the final edition of the A-BTR.
Introduction:

Acknowledging that climate action is urgently needed, the Paris Agreement – adopted in 2015 – establishes a series of long-term goals across climate change mitigation, adaptation, and the provision of support. Unlike under its predecessor, the Kyoto Protocol, the contributions of countries party to the agreement towards achieving the Paris Agreement’s goals are self-determined, i.e. countries decide on how and to what extent they reduce their national GHG emissions, implement adaptation, and provide support to developing countries. Under the Paris Agreement, countries submit their new pledges to the UNFCCC via their Nationally Determined Contributions (NDCs), which they are able to renew every five years.

The initial contributions pledged by countries in the first round of NDCs are not of sufficient magnitude to reach the goals of the Paris Agreement (UNEP, 2019). However, as the approach adopted in the Paris Agreement is centred around countries raising their levels of ambition over time, countries that have signed the agreement are expected to enhance the size and scope of their contributions in each five-year cycle. For this approach to work in practice, it is recognised that mutual trust will need to be built between countries as a means of enhancing the ambition of collective action. In order to establish this mutual trust, and to allow collective progress towards these goals to be monitored, the importance of ensuring transparency in actions and reporting is emphasized across the Paris Agreement.

For this purpose, the Paris Agreement under Article 13 establishes the Enhanced Transparency Framework (ETF) for action and support. The ETF establishes a new set of rules and procedures related to transparency that are intended improve the quality of country reporting to the UNFCCC. When it comes into force in 2024, the structure established by the ETF will form the basis of the Paris Agreement’s transparency arrangements that, for countries that have signed the agreement, will replace the Measurement, Reporting, and Verification (MRV) system that provides the basis for transparency under the convention.

The design and structure of the ETF is built upon the experiences of the MRV system that it supersedes. However, an important difference between the two systems is that the ETF will be applicable to all parties (i.e. the ETF’s rules and requirements will be equally applicable across annex I and non-annex I Parties). Continuing to acknowledge the differences in the capacity that countries have to adhere to rules and requirements, the ETF allows developing countries that need it in light of their capacities, to exercise a certain amount of flexibility regarding the extent to which they report against the ETF’s mandatory reporting requirements.1

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1 This ‘in-built flexibility’ however, is not applicable to all of the reporting requirements with some aspects remaining mandatory regardless of any shortage of capacity a country may have. To read about the reporting requirements posed by the ETF in more detail, please see chapter 2 of Dal Maso and Canu (2019)’s report ‘Unfolding the reporting requirements for Developing Countries under the Paris Agreement’s Enhanced Transparency Framework’.
The biennial transparency report under the ETF

To realise the new transparency arrangements for the Paris Agreement, the ETF establishes two reporting instruments to be used by countries to report on their greenhouse gas emissions and the progress they are making towards their respective climate goals. These instruments are: the national inventory report (NIR), a report containing a country’s national greenhouse gas inventory document and its common reporting tables, and the biennial transparency report (BTR).

The BTR represents the main reporting instrument under the ETF. For all countries that have signed the Paris Agreement, the BTR will directly replace both the Biennial Reports (applicable to annex I countries) and Biennial Update Reports (applicable to non-annex I countries) by 2024. Unlike these two reports, which are only designed to allow countries to report on mitigation, and support provided and/or received, BTRs will enable countries to report on progress towards all substantive aspects of the Paris Agreement. This includes adaptation (under Art 7) and loss and damage (under Art 8), as well as mitigation (under Art 4), and the provision and receivership of financial, technology development and transfer, and capacity building support (under Art 9, 10, and 11 respectively).

The guidance for the biennial transparency report

The guidance for the BTR, that ultimately outline the scope and functions of the instrument, was devised in negotiations at COP24 in Katowice. Along with the other elements of the ETF, they have been operationalised in decision 18/CMA.1. The annex of this decision document contains the Modalities, Procedures, and Guidelines (from hereon in referred to as the MPGs) for all functional aspects of the ETF, which (as can be seen in the Table 1 below) constitutes the NIR and BTR, and the inbuilt mechanism for reviewing the information included in these reports, the technical expert review (TER).

The MPGs provided for the NIR and the BTR across chapters II–VI represent the official UNFCCC guidance provided by the UNFCC to guide countries regarding what information these instruments should contain. The ‘explanation of the guidance’ provided by this document relates to the guidance provided for the Adaptation section of the BTR (from hereon in referred to as the A-BTR), which is found in chapter IV of the MPGs (see highlighted in Table 1 below).

TABLE 1

<table>
<thead>
<tr>
<th>Chapter title</th>
<th>Relevance</th>
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<td>TER</td>
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<td>VIII. Facilitative, multilateral consideration of progress</td>
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SECTION ONE: Reporting on adaptation under the UNFCCC

The purpose of section one is to provide readers with a top-level understanding of the UNFCCC’s system for communicating and reporting on adaptation. To do this, section one will first provide background information on the growing rationale and changing landscape for providing information on adaptation under the UNFCCC. Following this, it will introduce the various components of the UNFCCC’s system for communicating and reporting on adaptation, and provide an overview of how they work together.
Overview of the system for communicating and reporting on adaptation under the UNFCCC

Submitting information to the UNFCCC about their national adaptation processes has been undertaken by countries to varying extents since 1994, where annex I countries included information regarding vulnerability to climate change, expected impacts, and adaptation measures in their initial national communications. However, as countries have increasingly acknowledged the need to adapt to climate change, the demand and need for greater and more in-depth communication and reporting on adaptation needs, priorities, plans, and actions, under the UNFCCC has also increased. The desire of countries to establish a more comprehensive system for communicating and reporting information related to adaptation under the UNFCCC stems from a diverse range of reasons, including:

• To increase the visibility of adaptation and provide balance with mitigation (AILAC, 2013);
• To increase access to lessons learned and good practices;
• To enhance levels of accountability for international support, and;
• To provide a means of highlighting a lack of support in the face of the increasing adaptation challenges that climate change presents. (Möhner, 2018).

Information is delivered by countries to the UNFCCC via a number of national communication and reporting documents, commonly referred to as ‘instruments’, which are in principle updated and re-submitted to the UNFCCC at regular intervals. The guidance that accompanies these instruments, which ultimately determines how they are used by countries, is a product of the COP and CMA negotiations, and thus can be generally considered to reflect the desires and needs of countries. As can be seen in Table 2 on page 13, instruments relating to adaptation have been designed to serve a multitude of different purposes and functions.

In order to provide a simplified understanding of the instrument-landscape relevant to adaptation, this document broadly divides available instruments into two broad categories: ‘planning-orientated instruments’ and ‘reporting-orientated instruments’, based on whether an instrument’s primary function is to communicate forward-looking (ex-ante) information (e.g. adaptation ambitions, priorities, and plans), or provide backward-looking (ex-post) information (e.g. the progress towards goals, and the progress in implementing-, and results of-, planned actions, programmes, plans, and strategies).

Difficulties in categorising instruments as planning-orientated and reporting-orientated

In practice, classifying individual instruments as either ‘planning-orientated’ or ‘reporting-orientated’ is not always a clear cut exercise as most, if not all, instruments relevant to communicating and/or reporting on adaptation tend to include both information that is planning-orientated, e.g. forward-looking information about strategic priorities and planned actions, and information that is reporting-orientated, e.g. backward-looking information about progress in implementing planned actions and progress towards achieving goals.

This occurrence can be at least partially explained by the fact that neither good planning nor coherent reporting occur in isolation. For example, good planning processes should take the results of past experiences into account, which would logically be reflected in plans, and planning-orientated documents and communications in order to provide context to the planning decisions which are the primary contents of the document. Coherent reporting meanwhile, requires that the results of the activities being reported are considered against the priorities and vulnerabilities that they were planned to address. Therefore, reports should, as a minimum, make reference to this planning-orientated information in order to effectively inform its audience about the significance of the results.
Distinguishing between instruments based on how and why they are utilized by countries enables one to illustrate which stages of a 'national adaptation process' planning- and reporting-orientated instruments are primarily intended to reflect, and to model how information flows between different UNFCCC instruments. Both these dimensions are illustrated in Figure 1 below.

**FIGURE 1**

Simplified illustration of the relationship between the different stages of a national adaptation process, also known as the iterative adaptation process, and planning- and reporting-orientated instruments, and the global stocktake.

Figure 1 also demonstrates that, taken together, the various planning- and reporting-orientated instruments regularly submitted by countries can be considered to form a loose 'system' that facilitates the transfer of information between countries and the UNFCCC. Furthermore, as these instruments are subsequently made publicly available, they also enable information to transfer between countries and other key third parties such as NGOs, research institutions, climate and development funds, the private sector, and the general public.
How has this ‘system’ changed over time?

Over the lifespan of the UNFCCC, the system for communicating and reporting on adaptation has developed iteratively with a number of instruments being established at different COPs. The system started in 1995 following COP1, when national communications were established for Annex I Parties only. Following this however, the system has evolved gradually with instruments being added or updated at various COPs in order to expand or enhance the operational capacity the system in terms of function and effectiveness.

The Paris Agreement agreed at COP21 represents a watershed moment in the system’s development, significantly changing the instrument landscape. Agreed as a follow-up to the Kyoto Protocol in 2020, the decisions made under the Paris Agreement (i.e. decisions made at COP21 and the subsequent COPs) establish a number of new instruments which add to and build upon the previous arrangement of instruments, to the extent where it can be considered that a new arrangement has been formed. Although this new arrangement under the Paris Agreement is yet to come fully into force until 2024, it should significantly enhance the UNFCCC infrastructure for transferring information between country parties and the UNFCCC secretariat, including for adaptation.
The new arrangement for communicating and reporting on adaptation under the Paris Agreement

As mentioned in Box 2, the system for communicating and reporting on adaptation under the UNFCCC is changing following the Paris Agreement, as new instruments have been introduced, or are in the process of being introduced, while the role of others are effectively being reduced. Instruments relevant to communicating information concerning adaptation being introduced by the Paris Agreement include: nationally determined contributions (NDCs), adaptation communications, and biennial transparency reports (BTRs). Meanwhile, the pre-existing instruments that continue to have a role under the ‘new’ arrangement are: national adaptation plans (NAPs) and national communications. The purposes and approaches of these instruments are briefly outlined in Table 2 below.

Table 2 shows that the different instruments can contain common information about the different elements of a national adaptation process. For example, all instruments can include information on the country’s national circumstances and its vulnerabilities to climate change impacts. Likewise, they may all contain information about adaptation actions planned or being implemented by the country. While this may initially suggest that there is an unnecessary overlap between the various instruments, in many cases one can expect that the scope and level of detail of the common information included in these to vary significantly.

This is largely the case with the planning-orientated instruments (i.e. NDCs and NAPs or equivalent national adaptation plans) which provide their audiences with a lot of the same forward-looking information concerning a country’s situation, support needs, priorities, and plans; albeit the scope and level of detail of the information provided typically tailored to suit the documents primary audience and purpose as a communications instrument. For example, NDCs and NAPs can include information on planned adaptation actions. NDCs however, are likely to only make reference to flagship national adaptation programmes or frameworks. Meanwhile, as a planning document, NAPs should contain information on a much wider range of planned actions, including individual adaptation projects and policies, and describe them in greater depth.

However, between the reporting-orientated instruments available to countries (i.e. the national communication, adaptation communications, and BTRs), there is clear overlap with regards to their overarching function (i.e. they are all national reporting instruments) and the informational content that they are intended to contain (this is both in terms of the information related to adaptation that they are meant to contain and, in the case national communications and BTRs, the other common areas covered by these reports – i.e. information concerning mitigation, support provided, and support received). Despite this significant overlap, under the Paris Agreement the submission of both national communications and BTRs will be mandatory for all countries post-2024, while countries ‘should’ submit an adaptation communication. As such, once countries begin to use BTRs and, if they elect to, adaptation communications, there is risk that countries will expend unnecessary effort reporting the same information across different instruments when the timetables for these overlap.

As BTRs will be submitted every two years and national communications every four years, an overlap between these two reports will occur every four years (see figure 4 on page 17). Potential overlap between the submission of adaptation communications, and BTRs and national communications meanwhile, will be determined by the reporting country’s decision as to whether they use the adaptation communication to report on adaptation, and if they do, which instrument they choose to submit the adaptation communication as part of or alongside (see Box 3 below for more information about this decision). If submitted as part of, or alongside, either the BTR or national communication, the adaptation communication will overlap with the BTR and national communication every two years and four years respectively.

As a means of reducing the overall reporting burden posed by these three overlapping instruments, under key COP and CMA decisions, countries are able to submit either two, or even all three, of these instruments as a combined report when their submission deadlines overlap. Opportunities to do this are expanded on in Box 3 below.

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2 Instruments that have been established under the Paris Agreement may not yet have come into force, i.e. they are not scheduled to be submitted to the UNFCCC immediately after being established by a CMA decision. Adaptation communications for example, were established by article 7 of the Paris Agreement but did not have guidelines until COP24 in 2018. Likewise, the BTR was only established at COP24 in 2018 as a means of operationalising the ETF, and has a submission deadline of 2024.

3 NAPs have been excluded from this list, and subsequent descriptions of the system for communication and reporting on adaptation in this document as, although they have not been explicitly discontinued under the UNFCCC, uptake of NAPA processes have, to the best of our knowledge, stopped in favour of the NAP process.

4 According to the Paris Agreement, countries “should submit and update an adaptation communication” (UNFCCC, 2016 p.11). As such, adaptation communications are not considered to be mandatory under the Paris Agreement and therefore countries are able to choose whether or not they use one.
SECTION ONE: Reporting on adaptation under the UNFCCC

**BOX 3**

**Opportunities to streamline the adaptation reporting requirements of the national communication, adaptation communication, and BTR**

**Combining the national communication and BTR**

Submitting a combined national communication – BTR report when the submission deadlines overlap is allowed under decision 1/CP.24, agreed at COP24. The decision stipulates that countries choosing to submit a combined national communication – BTR report are required to use the guidance provided for the BTR for all sections common to both reports. Supplementary chapters of the national communication, namely “research and systematic observation” and “education, training and public awareness”, the contents of which are not covered by the BTR’s guidance, must be included in the report following the applicable national communication guidance.

However, as the BTR’s guidance stipulates that reporting adaptation in the BTR is voluntary (i.e. not mandatory), countries submitting a combined national communication – BTR report are able to choose whether they follow the guidance provided for the BTR’s adaptation section (i.e. that found in section IV of decision 18/CMA.1) or the applicable guidance for reporting on vulnerability and adaptation in the national communications (i.e. that found in section VII of decision 6/CP.25 for annex I countries or that found in section VI, paragraphs 28–36, of decision 17/CP.8 for non-annex I countries). Countries opting not to use the guidance provided for the BTR however, **must** include an adaptation section as per the applicable guidance for the national communication. While it is a decision for countries to take themselves, countries might find that it would be more logical to follow the BTR’s guidance when creating an adaptation section of a combined report as the guidance is more comprehensive and up-to-date.

**Combining adaptation communications with national communications and BTRs, amongst other instruments**

Submitting a combined national communication – adaptation communication, or a combined BTR – adaptation communication meanwhile, is allowed under the Paris Agreement and decisions made at COP24. Across these decisions, it is stipulated that adaptation communications **must** be submitted and updated periodically as a component of, or in conjunction with, other communications or documents, including NAPs, NDCs, national communications, and/or BTRs. This dimension of the adaptation communication means that the instrument does not have submission timetable of its own, instead using the timetable of the instrument it is submitted as part of, or in conjunction with.5

Countries who decide to submit their adaptation communication as part of their national communication or BTR are able to create a combined national communication – BTR – adaptation communication report when the submission deadlines of the BTR and national communication overlap.

**Further reading:**

Countries interested in streamlining their adaptation reporting through the submission of combined reports are guided towards the paper “Streamlining adaptation-reporting of developed countries under the Paris Regime” by Brocchieri et al. (upcoming). The paper provides an excellent and clear idea of how countries could effectively integrate the guidance for the adaptation communication, BTR, and national communication (for annex I countries) into one succinct report. As the title suggests, the paper is targeted towards developed countries who use the annex I guidance for national communications, however the paper can also serve as a useful, if not 100% applicable, guide for developing countries seeking to do the same thing.

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5 The instrument with which the adaptation communication is submitted as part of, or in conjunction with, is commonly referred to as the ‘vehicle’ for the adaptation communication.
TABLE 2

Descriptions of UNFCCC communications instruments that are both under the Paris agreement and pre-date the Paris agreement (i.e. are under the convention) with relevance to the planning of and reporting on adaptation.

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Adaptation relevant function</th>
<th>Submission frequency</th>
<th>Brief description of instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDCs</td>
<td>To communicate a country's top-level ambitions (i.e. high-level goals &amp; targets)</td>
<td>Every 5 years</td>
<td>NDCs are a relatively short communications document used by countries to communicate their pledges for climate action across mitigation, adaptation, and provision of support. As well as presenting their adaptation ambitions, the adaptation components of NDCs generally outline top-level information regarding their intended approach to achieving these ambitions and, if applicable, the country's support and capacity needs. Further, countries include, to varying extents, supplementary information that provides key background context including their national circumstances, and vulnerability to climate change. In future iterations of their NDC, i.e. after their initial NDC, countries may also choose to include information about their progress towards achieving pledges made in their previous NDCs. (UNFCCC, 2016).</td>
</tr>
<tr>
<td>NAPs</td>
<td>To communicate the process and outputs of a country's 'NAP process', to both domestic and international audiences.</td>
<td>Intended to be updated periodically, but with no set frequency.</td>
<td>The NAP process is a UNFCCC-endorsed semi-structured adaptation planning process designed to assist Least Developed Countries (LDCs) and other developing countries to formulate and implement strategic plans in the face of their medium- to long-term adaptation needs. A common output of this process is a 'national adaptation plan', a strategic planning document that describes a country's adaptation strategy (i.e. their adaptation goals, identified priority areas, and proposed/planned actions) and the background context upon which the strategy is based (e.g. information regarding the country's national circumstances and the results of national vulnerability assessments). Themes of information included in NAPs are likely to have strong similarities to those which are included in NDCs. In fact, one could expect the outputs of a NAP process (if undertaken by a country) to be reflected in NDCs. Such outputs could include, for example, the results from the national vulnerability assessments undertaken to inform the NAP process. However, due to their role in coordinating the implementation of the NAP process and securing financial support, NAPs should provide a greater level of detail than NDCs. Furthermore, the NAP process does not necessarily coordinate all adaptation activity being conducted within the jurisdiction of a country (i.e. adaptation activity can be undertaken outside the NAP process). Thus, while they are adaptation plans with a national scope, the content of a NAP is not necessarily a full account of all the national adaptation planning being undertaken within a country.</td>
</tr>
<tr>
<td>Equivalents national adaptation plans and strategies</td>
<td>To communicate a country's strategy and/or plan to adapt to climate change.</td>
<td>Should be updated periodically, but with no set frequency.</td>
<td>National adaptation plans and strategies are strategic planning documents that perform largely the same role as UNFCCC-endorsed NAPs, in so much as they are strategic planning documents that describe a country's adaptation strategy and/or plan. The key difference being between the two instruments is that national adaptation plans and strategies are planned and implemented externally to any UNFCCC processes, typically by countries that are not the target audience of NAPs; i.e. developed countries and non-LDC developing countries – although the latter group often do opt to undertake the UNFCCC's NAP process. As they do not necessarily follow the semi-structured NAP process, national adaptation plans and strategies are liable to vary more in their scope and approach. For example, non-UNFCCC strategies and plans may not include specific planned adaptation actions, nor might they include the same level of descriptive information about the process that has led to the formation of the national adaptation strategy or plan as is intended to be included in NAP documents. (Mullan et al. 2010).</td>
</tr>
</tbody>
</table>

* No guidelines presently exist regarding the information that should be included in the NDC's adaptation component. As such, in the first iteration of NDCs countries included a wide range of supplementary information to support their documented ambitions and support and capacity needs. UNFCCC (2016 p.59) provides a good synthesis of the information included in this first round of NDCs while, a full list of the common elements included by countries is included in the more detailed description of the instrument in the Annex.
# TABLE 2

<table>
<thead>
<tr>
<th>Instrument</th>
<th>Adaptation relevant function</th>
<th>Submission frequency</th>
<th>Brief description of instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REPORTING-ORIENTATED INSTRUMENTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>National communication</td>
<td>To provide an overview of adaptation being undertaken by the country.</td>
<td>Every 4 years (exc. LDCs and SIDS who may submit at their discretion).⁶</td>
<td>National communications are the original communication and reporting instrument under the UNFCCC and were initially designed as a means of capturing all activity under the convention, including adaptation. National communications possess two sets of parallel guidance, the applicability of which being dependent on a country's classification as annex I or non-annex I.⁷ Adaptation-related information requested by both sets of guidance is largely similar, with the guidance for the national communications of annex I and non-annex I countries both asking for information about a country's vulnerability to climate change, their support and capacity needs, their adaptation priorities and goals, their adaptation plans, and the status and results of their planned actions.</td>
</tr>
<tr>
<td>Adaptation communication</td>
<td>To provide a snapshot of a country's national adaptation process, including its vulnerabilities, and its support and capacity needs.</td>
<td>Dependent on the instrument that the adaptation communication is submitted as a part of, or alongside.</td>
<td>Established under the Paris Agreement, no country has yet released an adaptation communication and as such, there is no precedents for how it will look in practice. Furthermore, the adaptation communication is voluntary and explicitly &quot;flexible and country-driven&quot; (UNFCCC, 2019c p.23), which means that countries are not obliged to submit an adaptation communication. And if countries do elect to do so, they are able to choose how they approach the instrument and what they use it for. One approach that some countries are anticipated to use the adaptation communication is in a similar manner to how many countries have used the national communications to date. In this case adaptation communications would not give a 'comprehensive' overview of everything that is ongoing in a country, but instead provide a reasonable account (or ‘snapshot’) of the situation in a country, and the status of the national adaptation process. (Adaptation Committee, 2019a). In line with the intention that the instrument is flexible and country-driven nature, the guidance provided for the adaptation communication (commonly known as the elements of the adaptation communication) provides countries with nine general top-level elements that ‘may’ be included in the document. The information requested by these elements include, amongst other things: national circumstances; vulnerability to climate change; support and capacity needs (or alternatively their provisions of support to developing countries), and; progress towards implementation of adaptation plans and planned actions, and their results (the elements of the adaptation communication, as per decision 9/CMA.1, are presented in annex I of this document).</td>
</tr>
<tr>
<td>Biennial Transparency Report (BTR)</td>
<td>To report on adaptation being undertaken by the country.</td>
<td>Every 2 years, starting 2024</td>
<td>Established under the ETF (and therefore also under the Paris Agreement), the BTR is intended to facilitate the country reporting on mitigation and adaptation activities, and financial, technical, and capacity-building support provided and received. Following the coming into force of the ETF in 2024, the BTR will become the main reporting instrument for signatories of the Paris Agreement. The guidance for the instrument's adaptation section are more detailed than they are for the national communication, its de facto predecessor, and, amongst other things, include extensive guidance relating to reporting on the results of monitoring and evaluation (M&amp;E) processes applied to adaptation.</td>
</tr>
</tbody>
</table>

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⁶ The level of obligation to adhere to this timetable differs between annex I and non-annex I countries. Annex I countries ‘shall’ submit a national communication every four years, i.e. they are obligated to do so, while non-annex I countries ‘should’ do this. Thus, are expected to submit a national communication every four years, but are not obligated to. (UNFCCC, 2011).

⁷ These guidance is provided by decisions 6/CP.25 and 17/CP.8, which have relevance to annex I Parties and non-annex I Parties respectively.
A simplified model of how the ‘new’ arrangement will facilitate the transfer of information under the Paris Agreement is provided in Figures 3 and 4 below.

Figure 3 shows how information flows through the system. On its left side, Figure 3 demonstrates how information is intended to flow cyclically between the various instruments internally on the national-level. It shows that flows of information first originate in the planning-orientated instruments, where it would take the form of specified adaptation priorities, goals and targets, and plans.

This information should subsequently resurface in reporting-orientated instruments (here modelled as the combined national communication – BTR report), where the progress towards, and results of, these priorities, goals and targets, and plans, are reported on. Finally, the information generated and documented through the process of monitoring, evaluating, and reporting on the national adaptation process (e.g. new knowledge, good practices, experiences documented, and lessons learned) would, ideally, inform future adaptation planning in the country.

FIGURE 3

An understanding of the loose relationships between UNFCCC instruments, review processes, and provisions for increased ambitions and compliance that form the Paris arrangement for reporting adaptation.

The right side of Figure 3 introduces how the UNFCCC-driven mechanisms and processes are intended to interact with the cyclic flow of information that is occurring within the national sphere. For adaptation, the most significant of these mechanisms is the global stocktake for adaptation, a periodical assessment of the collective progress towards achieving the long-term adaptation goals of the Paris Agreement that occurs every 5 years.

The global stocktake process is intended to consider information from a variety of sources. This will include a synthesis report that will synthesize information from the various national reports and communications submitted to the UNFCCC and, where possible, the individual reports and communications themselves. As illustrated in Figures 1 and 3 above, the outputs of the process are anticipated to inform the future adaptation efforts of countries by: (a) identifying opportunities and barriers for enhancing action and support for collective progress; and (b) highlighting possible adaptation measures, new knowledge, good practices, experiences, and lessons learned.
Figure 3 also demonstrates that the adaptation sections of the BTR and adaptation communication will not be reviewed under the Technical Expert Review (TER) – the ETF’s review mechanism. Moreover, the vulnerability and adaptation chapters of non-annex I national communications will also not be reviewed. The same however, does not apply to developed countries who will continue to have the “vulnerability assessment, climate change impacts and adaptation measures” chapters of their national communications reviewed accordingly against the “technical review of national communications” outlined in decision 13/CP.20. Furthermore, none of the adaptation-related information submitted to the UNFCCC, under any of the above instruments, will be subject to the Paris Agreement’s mechanism for implementation and compliance established by article 15.

The submission timeline presented in Figure 4 below portrays the same inter-instrument information flows as Figure 3 above. The figure demonstrates that the timetabling of UNFCCC instruments and mechanisms is not perfectly aligned – e.g. NDCs and the global stocktake have a submission frequency of every five years, while national communications and BTRs have a frequency of every four and two years respectively. Figure 4 also visualises the gradual transition between the old arrangement for communicating and reporting on adaptation, to the new arrangement under the Paris Agreement. The transition period towards the full implementation of the new arrangement essentially started in 2015, when countries submitted their first NDCs. The transition will be completed by 2024, when countries are scheduled to submit their first BTRs.

FIGURE 4
A timeline denoting the submission deadline years of adaptation-relevant instruments.

As outlined in Table 2, adaptation communications do not have a single fixed timetable. Instead, their timetable is country-driven, with the only requirement being that they are submitted either alongside or as part of another instrument, ideally one that is also under the UNFCCC (e.g. NDCs, NAPs, national communications, and BTRs). In this figure, adaptation communications are illustrated as being submitted as part of a combined report with national communications (and subsequently the BTRs when the national communication and BTR submission deadlines overlap) however, this is only one of multiple possibilities for submitting this instrument available to countries.

Produced by authors.
Notes: NAPs have no formally associated timetable, as the decision on when to update a NAP lies completely with the implementing country. As a result, the 5-year timetable for updating NAPs presented in this figure is just an example.

The TER is only applied to sections of the BTR that contain information about mitigation activities and support provided to developing countries (covered by elements III and V of the MPGs).
SECTION TWO: THE BTR’S ADAPTATION

Ahead of the detailed explanation of its guidance provided in section three, section two aims to provide readers with an overview and understanding of the aims and intended functions of the A-BTR. To do this, the section will outline what reporting through the A-BTR is intended to achieve, present how countries could approach the task of reporting adaptation through the A-BTR in lieu with the instrument’s aims, and finally, describe how countries could also use the instrument to highlight specific aspects of their national adaptation process or their national situation.
**The purpose of reporting adaptation through the A-BTR**

In relation to adaptation, the MPGs state that the purpose of the ETF is “to provide a clear understanding of climate change action in the light of the objective of the Convention as set out in its Article 2, including [...] Parties’ adaptation actions under Article 7, including good practices, priorities, needs and gaps, to inform the global stocktake under Article 14” (UNFCCC, 2019a p.20).

As the main reporting instrument under the ETF – and the only one capable of facilitating reporting on adaptation – the A-BTR is intended to be the instrument through which the adaptation-relevant aspects of the ETF’s given purpose are achieved (see page 7 for an overview of what is included in the ETF).

In practical terms, the given purpose for the ETF means that the primary aim of the A-BTR is to facilitate national reporting that is capable of contributing to the collective understanding of adaptation.

Coordinated national reporting is capable of doing this on multiple levels. For example, on top of providing an update as to the condition of adaptation processes at the individual country level, the multi-country data that is generated by coordinated national reporting (e.g. information about the status and priorities of countries national adaptation processes, and the needs and gaps that inhibit them from advancing further) is able to provide insights as to the status and trends of adaptation at regional- and global-levels. Alternatively, national reporting can also contribute to the collective understanding of adaptation at the action-specific level. Which it is able to do through the documentation of what approaches to adaptation work in what circumstance, or any specific good practices for planning and implementing adaptation established.

In order to be able to enhance our collective understanding of adaptation however, national reporting that is conducted through the A-BTR will need to be comprehensive enough, and with a sufficient levels of detail and clarity, to enable the report’s audience to better understand what has been done so far by the reporting country and what the results of their actions have been.

**Approaches to reporting adaptation through the A-BTR**

In light of the given purpose of the A-BTR, countries that decide to produce an A-BTR might choose to use it as their main instrument for reporting on adaptation. Countries using the A-BTR in this fashion would use it as their ‘one-stop-shop’ for reporting on all the available ‘backward-looking’ information that is generated and tracked as countries begin to work towards addressing their adaptation priorities, achieving their adaptation targets, and implementing the planned adaptation actions that they have presented in previously published adaptation plans and planning-orientated communications, i.e. NDCs, NAPs, and equivalent national adaptation plans.

However, producing a comprehensive account of their national adaptation process on a biennial basis that includes information derived from, amongst other things, monitoring and evaluation systems is, to varying extents, likely to be beyond what is presently possible for many developing countries due to present limitations in their technical capacities and limitations in the resources they have available to them to allocate to such an exercise.

To some extent, the MPGs recognise this situation as they emphasize that the implementation of the ETF’s reporting requirements should not place additional or undue reporting burdens on countries. At the same time, they also emphasize that there is a need for reporting and transparency to improve over time – something that will likely be fundamental for the ETF to achieve its intended purpose.

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10 The full purpose of the ETF as a whole, with additional relevance to mitigation under Article 4 and provision and receipt of support under Articles 9, 10, and 11, is found across paragraphs 1 and 2 of the MPGs.

11 The global stocktake, as well as non-UNFCCC processes such as UNEP’s Adaptation GAP Report, are strongly anticipated to use (or are already using) data from UNFCCC national reporting processes as a key input for their global and regional assessments of the state and trends in adaptation (Christiansen et al., 2020).
In line with these principles, the MPGs include some explicit provisions that will enable countries producing an A-BTR to avoid duplicating reporting efforts and to reduce their reporting burden where they deem it necessary or fit to do so. Additionally, they also include a provision designed to facilitate the desired continuous improvements in country reporting and transparency. These provisions are described in Box 4 and Box 5 below.

**BOX 4**

**Avoiding duplication of work and undue burden on Parties and the secretariat**

As part of design the of the ETF, the Paris Agreement and the MPGs have recognised the need to avoid placing additional undue reporting burdens on countries, particularly those least able to cope with such burdens (i.e. SIDS and LDCs). Recognising this, the MPGs include some explicit provisions that will enable countries to reduce their potential workloads where they deem it necessary or fit to do so.

The most obvious of these provisions is the ETF’s provision of flexibility towards its implementation for developing countries. This in-built flexibility is designed to assist developing countries lacking technical and financial capacities to avoid expending disproportionate amounts of resources in meeting their reporting obligations under the UNFCCC. However, on a practical level, the provision of ‘in-built flexibility’ is essentially redundant for the A-BTR as it can only be applied to the mandatory reporting requirements, i.e. those with the preface “Each Party shall”. As reporting requirements for the A-BTR are non-mandatory, by definition countries are already able to decide whether they will fulfil them or not without need to activate the flexibility provision.

A second provision however, states that countries are able to “cross-reference previously reported information and focus its reporting on updates to previously reported information” (UNFCCC, 2019a p.22). This provision is only applicable to the A-BTR and it is significant as it provides countries with an effective means of reducing the quantity of information it needs to include in the actual A-BTR document, without leading to the information being lost. According to the MPGs, this provision is intended to allow countries to “focus its reporting on updates to previously reported information”.

**BOX 5**

**Facilitating improved reporting and transparency over time**

To support countries in improving their reporting and transparency over time, the MPGs states that countries should, as part of producing their BTR, identify, and include information on, any areas of their reporting in which they believe they need to improve upon – referred to as ‘areas of improvement’ in the MPGs. For information related to reporting on adaptation, this should, if applicable, describe how the country is addressing, or intends to address, these areas and/or if the country requires capacity-building support to do this. This section of the BTR would include references to any aspects of A-BTR that the reporting countries deem they need support in order to improve.

While any information included in the BTR about ‘areas of improvement’ related to reporting on adaptation might not necessarily be included in its adaptation section (an ‘areas of improvement’ could feasibly form the basis of a separate chapter), authors of the A-BTR should be aware of this provision in the guidance as they are likely to be best placed to inform and contribute towards any adaptation-aspects of their country’s ‘areas of improvement’, if their country chooses to produce one.
Additional communication functions of the A-BTR

In addition to using their A-BTRs to report on their progress towards implementing adaptation plans and actions, and progress towards reaching their adaptation goals, countries could also use their A-BTRs as an opportunity to include information about specific aspects of their country’s national adaptation process or aspects of their national situation that they wish to communicate to the UNFCCC and the international community more generally. This could been done in a variety of ways as what a country decides to communicate, and how it decides to communicate it, will vary depending on what the country wishes to achieve through including this additional information. However, without limiting the scope of what could be possible, the A-BTR’s given purposes and information requested by its guidance clearly suggest that the report could be used by countries in order to:

• Communicate information about specific good practices established, experiences had, and lessons learned during the implementation of their national adaptation process that may be of interest to the report’s audience, potentially in the form of case studies.

• Gain recognition for adaptation it has supported and implemented. Developing countries may wish to highlight adaptation actions that they have supported and/or implemented in its A-BTR. Such information could potentially be complemented with information about any achievements made, good practices established, experiences had, and/or lessons learned during the implementation process.

• Emphasize need for greater and/or more targeted support. Developing countries may wish to use the A-BTR to highlight the specific technological, capacity building, and financial support they need in order to address their adaptation priorities and meet their adaptation goals.

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12 This objective refers to a need to recognise the extent to which developing countries are using their own domestic funds and resources to implement adaptation, including through South-South cooperation. These forms of adaptation were not typically captured under the previous transparency arrangement (Adaptation Committee and LEG, 2016; Ngwadla and El-Bakri, 2016).
SECTION THREE: Explanation of the guidance for the A-BTR

The purpose of section three is to provide practitioners and technicians charged with creating the adaptation sections of their country’s BTR with a tangible and practical explanation of its guidance, found in chapter IV of the MPGs. To do this, section three will approach each section of the guidance chronologically (i.e. from A–I) and provide an explanation of what information the guidance is asking for, why this information is important to the reporting process, and to outline any important considerations regarding how this information is presented. Ahead of this however, section three will also provide readers with an overview of the structure and scope of the A-BTR’s guidance.

Overview of the guidance

The guidance for the A-BTR, as provided in the MPGs, is divided into nine sections (A–I). While these sections do not form a strict or recommended structure for the A-BTR document as is provided in the annex I and non-annex I guidance for national communications, they do provide the guidance themselves with a clear structure that logically divides the range of specific requests for information it makes into broad interrelated areas, the nature of which is provided by the section’s headline.

Figure 5 on the following page provides a simplified overview of the A-BTR’s guidance. The ‘main body’ of the guidance contained within sections A–F, illustrate that the A-BTR is designed to allow countries to report on their entire national adaptation processes, from the initial phases of ‘identifying the vulnerability context’ to the latter phases of ‘monitoring implementation and evaluating the results of adaptation’.

Although enabling countries to report on their national adaptation processes is undoubtedly the primary function of the A-BTR, the structure of the guidance also indicates that the A-BTR can be used by countries to report on impacts and actions in other areas that are related to adaptation and relevant under the UNFCCC. Primarily these are: loss and damage – the guidance for reporting on which is located in section G; and supporting activities, i.e. collaboration, knowledge-sharing activities, and research-orientated activities, which are being carried out in order to support or enhance the national adaptation process – the guidance for reporting on which is located in section H.
Simplified overview of how the different sections of the A-BTR’s guidance, as provided by the MPGs, relate to the different stages of a country’s national adaptation process.

Adapted from Berrang-Ford et al., (2019).
Introduction to the explanation

The explanation of each section will begin by presenting the actual guidance for the section as found in the MPGs. Following this, the explanation will reframe the requests for information being made by each section of the guidance into a series of one or more questions in order to more clearly articulate what information each section is asking countries to provide in their BTRs, and highlight why the information requested by each section is important to the functions of the A-BTR document (i.e. what purpose does presenting this information serve).

Questions within this framing will be presented as either: core questions or supplementary questions.

Questions presented as core questions are those to which the answers are considered integral to the main purpose of the section and, ultimately, the functionality and coherence of the A-BTR.

Meanwhile, questions presented as supplementary questions are those to which the answers are considered important but not integral to the main purpose of each section. These questions would seek additional information that provides further understanding, context, and/or transparency to the core information that is requested in the same section. If not included in the report however, the absence of this additional information would not have detrimental impact on the document’s capacity to coherently inform its audience, although the document’s capacity to do so will arguably have been weakened.

In addition to explaining and re-framing the guidance, where possible, the explanations of sections A–I will include “useful examples” of how the information requested by the guidance could be included in an A-BTR. Examples provided in this document are taken previous national documents published by countries (e.g. NAPs and national communications) or from literature released by research organisations and development agencies.

Ahead of presenting the section-by-section explanations of the guidance, a summary of the core and supplementary questions posed by each section is presented in Figure 6. Based on the interpretation provided by this document, an A-BTR that answers all the questions presented below in full will meet the requests made by the guidance.
## FIGURE 6
Overview of ‘core’ and ‘supplementary’ questions posed by sections of the guidance.

<table>
<thead>
<tr>
<th>A D A P T A T I O N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section A</strong></td>
</tr>
<tr>
<td>What is the starting point for adaptation in your country?</td>
</tr>
<tr>
<td><strong>Section B</strong></td>
</tr>
<tr>
<td>What are the present and future climate impacts facing your country?</td>
</tr>
<tr>
<td>What methodologies and tools were used in your analyses of climate impacts?</td>
</tr>
<tr>
<td><strong>Section C</strong></td>
</tr>
<tr>
<td>What are the priority areas for adaptation in your country?</td>
</tr>
<tr>
<td>What barriers to progress have been identified in these priority areas?</td>
</tr>
<tr>
<td><strong>Section D</strong></td>
</tr>
<tr>
<td>What adaptation actions have been planned by your country?</td>
</tr>
<tr>
<td>How has your country designed and selected the adaptation actions it has planned?</td>
</tr>
<tr>
<td>Which of your country’s national development priorities are relevant to its planned adaptation actions?</td>
</tr>
<tr>
<td><strong>Section E</strong></td>
</tr>
<tr>
<td>What is the implementation status of the adaptation actions planned by your country?</td>
</tr>
<tr>
<td>How much of your country’s adaptation programme has had international support and how effective have supported actions been?</td>
</tr>
<tr>
<td><strong>Section F</strong></td>
</tr>
<tr>
<td>What are the outcomes and impacts of the adaptation actions your country has implemented?</td>
</tr>
<tr>
<td>How effective and sustainable have these implemented adaptation actions been, and how replicable are they?</td>
</tr>
<tr>
<td>What are the capacities, capabilities, and characteristics of your national system for M&amp;E adaptation?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>L O S S A N D D A M A G E</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section G</strong></td>
</tr>
<tr>
<td>What losses and damages have been, or are anticipated to be, incurred by your country as a result of climate change?</td>
</tr>
<tr>
<td>What is your country doing to manage present and future losses and damages?</td>
</tr>
<tr>
<td>What institutional arrangements exist to facilitate the management of loss and damage?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>S U P P O R T I N G A C T I V I T I E S</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section H</strong></td>
</tr>
<tr>
<td>What activities has your country undertaken or participated in that support domestic or international adaptation processes?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>M I S C E L L A N E O U S</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Section I</strong></td>
</tr>
<tr>
<td>Is there anything else related to climate change impacts and adaptation that your country would like to report on?</td>
</tr>
</tbody>
</table>

Produced by authors.
Section A: National circumstances, institutional arrangements and legal frameworks

106. Each Party should provide the following information, as appropriate:

(a) National circumstances relevant to its adaptation actions, including:
   biogeophysical characteristics, demographics, economy, infrastructure and information on adaptive capacity;

(b) Institutional arrangements and governance, including:

(c) Legal and policy frameworks and regulations.

Figure 7. Section A, chapter IV of the Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement document. UNFCCC (2019a). [red text] represents text not in the original document.

The core question posed by section A is:

What is the starting point for adaptation in your country?

The main purpose of section A is to ensure that A-BTRs include descriptive information about the key characteristics of the reporting country that are important for understanding the starting point for adaptation planning processes at the national-level.

As can be seen in the guidance, key aspects to be described fall under two broad themes: (1) national circumstances, and (2) institutional arrangements and legal frameworks.

For the first ‘theme’, countries are essentially being asked to provide informative descriptions of various key dimensions of their country (e.g. its natural/ geographic characteristics, population, economy, infrastructure, and its overall adaptive capacity).

The inclusion of this information is key to providing the report’s audience with an understanding how the different nuances of exposure, risk, and vulnerability presented by climate change (information on which is requested by section B), may interact with the different dimensions of the country in question. The information that would be included here is likely to be a mix of quantitative data and descriptive information with references to the results of relevant national studies and surveys when appropriate (e.g. population censuses).

Useful examples:

An interesting example of how a country has previously presented information about its national circumstances can be seen in the UK’s 7th national communication 2017 (chapter 1, p.20–47).

In their 7th national communication, the UK presents its national circumstances at the start of the report. While in national communications this section is intended to show how national circumstances have affected national GHG emissions, some of the information provided here is also important for understanding the national context in which adaptation is being implemented within – e.g. government and population profiles.
For the second ‘theme’, countries are being asked to provide information about existing institutional and legal arrangements that are designed to facilitate, or are relevant to facilitating, climate change adaptation.

The inclusion of this information will provide the report’s audience with an understanding of the extent to which there is a robust legal and/or institutional basis for adaptation, as well as what gaps there might be in the present set-up. In contrast to information concerning the national circumstances, information included here would likely take a format more akin to a catalogue, in which reporting countries would map out and provide descriptions for the relevant institutions, arrangements, coordination mechanisms, governance structures, legal/policy frameworks, laws and regulations.

BOX 6

Avoiding the duplication of information relating to national circumstances

The guidance provided for each section of the BTR (provided across chapters III, IV, V, and VI of the MPGs) all request information about the country’s national circumstances. This poses a challenge for authors of the various sections of the BTR, who will need to coordinate where information is situated in the document, and in what format, in order to avoid the duplication of information, which could otherwise happen up to three times in a full BTR. To solve this, it is likely that authors will have two broad options:

• Information about a country’s national circumstances will be situated in a single chapter within the BTR that bears relevance to the whole report (i.e. not just adaptation). Such a chapter could look similar to the national circumstances chapter of the UK’s 7th national communication (see the useful example above), albeit with more information that is specifically relevant to the national processes of adaptation, i.e. information relating to the institutional and legal context within which adaptation is being implemented, and the country’s adaptive capacity.

• Each chapter of the BTR will possess its own national circumstances section. However, under this format, it would then be up to the authors to find a means of distinguishing between aspects of the national circumstances that are relevant to adaptation, and what are relevant to mitigation, in order to minimise duplication.

For many countries, providing the information relevant to this section will be nothing new as this information has been a common feature of national documents relevant to climate vulnerability and impacts. As such, in the absence of new and/or updated information, it is likely that the information requested by this section is already enclosed in existing national documents such as national communications, NAPs, and other national adaptation plans/strategies.

Useful examples:

An interesting example of how a country has previously presented information about existing institutional and legal arrangements can be seen in Kenya’s NAP 2015–2030 (chapter 2, p.8–13).

Chapter 2 of Kenya’s NAP provides a breakdown of the governance structures and adaptation-relevant legislation via the use of clear, concise, and logical sub-chapters (2.1–2.5). Notably, when describing the institutional arrangements, it distinguishes between coordination and implementation roles.
Section B: Impacts, risks and vulnerabilities

107. Each Party should provide the following information, as appropriate:
(a) Current and projected climate trends and hazards;
(b) Observed and potential impacts of climate change, including sectoral, economic, social and/or environmental vulnerabilities;
(c) [i] Approaches, methodologies and tools, and [ii] associated uncertainties and challenges, in relation to paragraph 107(a) and (b) above.

Figure 8. Section B, chapter IV of the Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement document. UNFCCC (2019a). [red text] represents text not in the original document.

The core question posed by section B is:

What are the present and future climate impacts facing your country?

The main purpose of section B is to ensure that A-BTRs provide information on the impacts of climate change that are being presently felt by the reporting country, and how these impacts are projected to change in the future. As is suggested by the guidance, providing this information would logically occur over two-parts: (1) describing the past and future (projected) changes in the country’s climate, including changes in the frequency and severity of climate-related hazards; and (2) describing how these changes have impacted the various important dimensions of the country (i.e. social, environmental, and economic dimensions, as well as across key sectors of the national economy), and how these impacts are projected to develop in the future.

Providing this information in the A-BTR will enable the report to adequately inform its audience about the reporting country’s exposure to impacts of climate change, and enable them to understand how and why various key aspects of the country are vulnerable.

As with the previous section, the provision of such information has been a mainstay in communicating climate impacts and adaptation needs in previous UNFCCC instruments, e.g. national communications, NAPs, and other national adaptation plans/strategies. Based on these documents, supplying this information will likely involve the provision of a mix of quantitative data, descriptive information and visual aids, with references to the results of climate modelling exercises, vulnerability assessments, and other relevant exercises/studies.
Useful examples:

An interesting example of how a country has previously presented information about the present and future impacts of climate change they face can be seen in the People’s Republic of China’s third national communication (Part III, chapters 1–2, p. 65–97).

In their third national communication, China has adopted a very clear and structured approach to presenting information concerning long-term climate trends and the impacts of these changes. It does this presenting the past trends and anticipated future trends in key climate characteristics (temperature, precipitation, etc.) and relevant extreme weather events in one distinct chapter, and the summarized results of climate change impact and vulnerability assessments in another. Information in both chapters is presented descriptively (i.e. in-text), supplemented with figures and/or tables where relevant.

While being an example of a logical and easy-to-read presentation of long-term climate trends and their associated impacts generally, China’s third national communication also provides an example of how countries can link their presentation of climate impacts and vulnerability with their priority areas/sectors for adaptation (information for which is requested by section C of the guidance) and, in turn, the presentation of their adaptation actions (information for which is requested across sections D–F). In this document, China has presented the results of impact and vulnerability assessments for five priority sectors (agriculture, water resources, terrestrial ecosystems, coastal zones and infrastructure, and public health). These five sectors then go on to form the structural basis for presenting China’s ‘adaptation goals and tasks’ in chapter 3.1 (i.e. presented goals and tasks are presented in relation to these sectors), and the structural basis for reporting on their policies and actions designed to achieve these goals and tasks (i.e. policies and actions being reported on are presented as contributing towards adaptation in these areas). The result of this structure that readers of this national communication are able to understand why these adaptation goals and tasks have been selected, and what China is doing to address them.

This approach exemplified in China’s third national communication represents just one of many ways in which information requested by the various sections of the A-BTR’s guidance could be logically structured in order to allow the reader to easily understand the links between, and relevance of, the various elements of information being provided in the A-BTR.

Supplementary questions posed by section B are:

What methodologies and tools were used in your analyses of climate impacts?

To support the above, section B also asks countries to document and describe the methodologies and tools applied in this process, including their associated limitations, uncertainties, and challenges. The purpose of providing this supplementary information is to ensure that countries provide a level of transparency about the process they have undertaken in order to determine their country’s exposure and vulnerability to climate change.

Integrating this information within the description of the climate impacts sought above could be achieved through a number of methods, including: providing in-text or annexed descriptions, footnotes/endnotes, and/or using cross-references (ideally using a recognised style of academic referencing).
Section C: Adaptation priorities and barriers

108. Each Party should provide the following information, as appropriate:
(a) [i] Domestic priorities and [ii] progress towards those priorities;
(b) Adaptation challenges and gaps, and barriers to adaptation.

Figure 9. Section C, chapter IV of the Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement document. UNFCCC (2019a). [red text] represents text not in the original document.

The core question posed by section C is:

What are the priority areas for adaptation in your country?

The main purpose of section C is to ensure that A-BTRs present and describe the reporting country’s priority areas for adaptation and any associated top-level goals and targets. Areas identified as priorities could be broad vertical entities such as specific sectors, regions, and ecosystems that are of relatively high importance to the country and/or highly vulnerable to the impacts of climate change. Alternatively, they could also be horizontal in nature, i.e. associated with establishing or enhancing institutional structures that represent the enabling environment for adaptation planning and implementation.

In providing descriptions of their country’s priority areas, authors would ideally include explanations of how and why they were selected.

Descriptions of ‘how priority areas were selected’ should provide an account of the formal procedures and processes through which priority areas have been identified and selected. This could be achieved through providing a free narrative describing both the past procedures and processes that have ultimately led to the adoption of the country’s present priority areas, goals, and targets – e.g. stakeholder workshops and expert working groups. Furthermore, countries should also outline planned procedures and processes that are intended to facilitate the updating of these priority areas, and associated goals and targets, over time – e.g., planned review cycles, follow-up workshops.

Descriptions of ‘why certain priority areas were selected’ should be based on the outputs of the selection procedures and processes described above. These processes may, for example, include ranking exercises that would compare, amongst other things, risks and vulnerabilities against a pre-determined criteria and weighting.

The provision of this information should enable the report’s audience to understand how the planned adaptation actions reported on in the A-BTR (requested by section D of the guidance) are intended to contribute to the country’s overall adaptation strategy – specifically to the priority areas, and their goals and targets, selected under this strategy. In the same way, the provision of comprehensively described national priority areas, and associated goals and targets, should provide readers with an understanding as to why actions being planned and implemented by the reporting country were chosen in the first place, as well as providing them with a basis for evaluating if, and to what extent, their adaptation actions are addressing the vulnerabilities of their national priority areas.13

13 If some of the actions being planned and implemented by your country are clearly not aligned with its adaptation priorities (e.g. they target a non-prioritised sector), authors might consider providing some form of explanation as to why the actions were chosen despite their misalignment from their national priorities.
Supplementary questions posed by section C are:

**What barriers to progress have been identified in these priority areas?**

In addition to the descriptions of domestic priority areas, section C also asks countries to provide descriptions of identified barriers that may inhibit adaptation progress in addressing vulnerability to climate change in these priority areas.

These descriptions should describe any known barriers to adaptation that will need to be overcome in order to enable countries to address vulnerability in their priority areas for adaptation and achieve any associated goals and targets. This information could have resulted from structured processes commonly known as a barrier analysis, in which barriers to both adaptation planning and implementation are systematically analysed. As such, descriptions of barriers provided in the A-BTR should reflect the results of these analyses, ideally including background information concerning the process itself, i.e. how it was conducted.

Including this information in the A-BTR should provide the report’s audience with further context as to why the adaptation actions reported on later in the A-BTR have been prioritised for selection.

**Useful examples:**

An interesting example of how a country has previously provided information about their priority areas for adaptation can be seen in the Fiji’s NAP 2018 (Part 2.5, p.29–33).

Fiji’s NAP provides a very general analysis of the barriers towards adaptation, identifying five broad types that are anticipated to inhibit its planned adaptation actions. While ideally, such an analysis would perhaps be conducted on a sectoral level, Fiji’s NAP has presented these results well, clearly articulating, amongst other things: the purpose of the exercise, how the exercise was conducted, and the implications it has had on its national adaptation process.

**Further reading:**

For authors seeking more information on what a structured barrier analysis could look like, a step-by-step guidance regarding how a barrier analysis can be conducted can be found in Ekstrom et al. (2011)’s ‘**Barriers to Climate Change Adaptation: A Diagnostic Framework**’. As suggested by the title, the document provides instructions for using a framework that will enable actors to identify barriers to planned adaptation and produce a road map to design strategies to address these barriers.

The steps outlined in this framework are likely to be similar to the process(es) that should be reported on in section C, and as such, familiarising one's self with this framework – or similar frameworks – should provide the authors with a greater insight into what information relating to barrier analyses should be included in the A-BTR document.
Section D: Adaptation strategies, policies, plans, goals and actions to integrate adaptation into national policies and strategies

109. Each Party should provide the following information, as appropriate:

(a) Implementation of adaptation actions in accordance with the global goal on adaptation as set out in Article 7, paragraph 1, of the Paris Agreement;

(b) Adaptation:

[I] goals, [II] actions, [III] objectives, [IV] undertakings, [V] efforts, [VI] plans (e.g. national adaptation plans and subnational plans), [VII] strategies, [VIII] policies, [IX] priorities (e.g. priority sectors, priority regions or integrated plans for coastal management, water and agriculture), [X] programmes and [XI] efforts to build resilience;

(c) How best available science, gender perspectives and indigenous, traditional and local knowledge are integrated into adaptation;

(d) Development priorities related to climate change adaptation and impacts;

(e) Any adaptation actions and/or economic diversification plans leading to mitigation co-benefits;

(f) Efforts to integrate climate change into development efforts, plans, policies and programming, including related capacity-building activities;

(g) Nature-based solutions to climate change adaptation;

(h) Stakeholder involvement, including subnational, community-level and private sector plans, priorities, actions and programmes.

The core question posed by section D is:

What adaptation actions have been planned by your country?

The main purpose of section D is to ensure that A-BTRs include information relating to adaptation actions that have been planned by the reporting country in its efforts to adapt to climate change, including planned actions that have already been, or are in the process of being, implemented. This request is relevant to all possible types of adaptation action planned by the reporting country, although additional emphasis is placed on including and specifically highlighting adaptation actions that have mitigation co-benefits, qualify as being a ‘nature-based solution’, or that constitute mainstreaming, in the reporting process.

As the A-BTR’s primary focus is reporting, planned adaptation actions to be included here are likely to have already been communicated in previous national documents (e.g. in NAPs or equivalent national plans/strategies). However, despite this, there is no reason why new actions that, for whatever reason, have not been previously communicated in previous plans and communications, cannot be included.

14 The eleven-part list that accompanies the request for information on adaptation made by (b) essentially catches all the various types, formats, and classifications of adaptation and thus, can be understood to be insinuating that the request is relevant to all possible types of adaptation.

15 This emphasis is made by requests (e), (f), and (g).
To the extent that is possible, each edition of the A-BTRs would ideally form a full catalogue of the adaptation actions being undertaken by a country’s government, containing updated information on all adaptation actions that are presently active (i.e. those that are either planned, in the implementation process, or implemented but actively being monitored and evaluated). However, for countries that lack the financial resources and/or the technical capacities to establish and maintain a database archiving adaptation actions being implemented across the different horizontal and vertical levels of government, achieving full coverage on a biannual basis may not be possible, at least in their initial BTRs.

As part documenting these actions in the A-BTR, section D explicitly asks authors to include information about how these actions contribute to the various dimensions of the global goal on adaptation.16 This would likely involve describing how the action’s planned outputs, and intended outcomes and impacts are anticipated to enhance adaptive capacity, strengthen resilience, reduce vulnerability to climate change, and/or, contribute to national priorities, policies/strategies, goals, and/or targets associated with sustainable development, either directly or indirectly.

In addition to what is outlined by the guidance however, authors might choose to provide further information about the planned actions. This could, as appropriate, include information about the inputs allocated to an action (e.g. budgets), and/or logistical details surrounding its implementation (e.g. implementing actors, intended beneficiaries, geographic scope, the action’s lifespan).

Providing the requested information (i.e. concerning the global goal on adaptation) will allow the report’s audience to understand the aims and ambitions of the action being documented (i.e. what impact is the action intended to have). Furthermore, if the action’s results are also being reported on in the report, this information will also provide the audience with a reference point for gauging if and to what extent the action was effective achieving its objectives. Supplying further information that is not explicitly requested however, will allow the report’s audience to get a better and more tangible understanding of the nature and scope of the action being documented.

16 This request can be found in request by (a). The global goal on adaptation it refers to is: “enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the global temperature goal” (UNFCCC, 2016 p.9).

**BOX 7**

**Cross-referencing between documents**

As mentioned above, much of the information presented here, should theoretically be available in previous publicly available national documents. When this is the case, instead of re-presenting descriptive information about actions in full, authors may find it beneficial to use cross-referencing to direct readers who want more information about planned actions towards the relevant documents (see Box 4, page 20). This could be particularly useful when providing full descriptions requires significant amounts of space in the document to the extent where it could potentially cause practical issues with regards to the length of the document.

Authors however, should be wary of over-using cross-referencing as an alternative for presenting information in the A-BTR itself as using this mechanism will ultimately reduce the coherency of the final document. This would particularly be the case when information being cross-referenced to is important for the report’s audience to fully understand new information being presented by the A-BTR (e.g. background information about a planned action may be key to fully understanding the significance its outputs, outcomes, and impacts being reported on).
The first supplementary question posed by section D is:

How has your country designed and selected the adaptation actions it has planned?

In addition to providing information on the actual adaptation actions planned, section D also asks countries to provide information about how, or to what extent, stakeholders have been engaged in the planning process, and how adaptation principles such as ‘best available science’, ‘gender perspectives’, ‘indigenous, traditional and local knowledge’ have been integrated into the process for designing adaptation actions.

While the information requested by the guidance is targeted towards the specific principles and good practices explicitly mentioned, providing this information could be included as part of a broader description of the processes through which the planned adaptation actions have been designed and selected. These processes would be those that chronologically follow the selection of priority areas for adaptation and barrier analysis referred to in section C and could include processes for identifying adaptation options at various levels (i.e. national, sub-national, sectoral, etc.), processes for designing adaptation actions, and processes for reviewing and appraising these options.

As with the description of processes that led to the selection of priority areas for adaptation in section C, any broad description provided here could be achieved through a free narrative that describes the work done to identify, design, and select adaptation actions. Amongst other things, a free narrative could include descriptions of the format of the various processes undertaken, the stakeholders involved in these processes, and the criteria against which actions were designed, reviewed, and ultimately selected. Moreover, the principles and good practices explicitly listed in the guidance are both important to ensuring enhanced adaptation and well emphasized across key UNFCCC decisions (e.g. the Cancun Adaptation Framework), authors should not necessarily view this list as exhaustive. As such, where appropriate authors should feel free to describe additional principles and good practices that have been integrated into their country’s processes for designing and selecting adaptation actions that have not been explicitly mentioned in section D.

The second supplementary question posed by section D is:

Which of your country’s national development priorities are relevant to its planned adaptation actions?

The section D also asks countries to provide supplementary information regarding their country’s national development priorities that are linked to adaptation. While failing to outline relevant development priorities would not be detrimental to the functionality of the A-BTR per se, providing concise descriptions of important development priorities, policies and strategies, and/or goals and targets, that are relevant to adaptation would provide the BTR’s audience with important context that would enable them to better understand why specific actions have been selected (particularly if descriptions of these actions outline how they are intended to contribute to sustainable development), and how the reporting country’s overall approach to adaptation aligns with its development goals.
SECTION THREE: Explanation of the guidance for the A-BTR

Section E: Progress on implementation of adaptation

110. Each Party should provide the following information, as appropriate, on progress on:
(a) Implementation of the actions identified in chapter IV.D above;
(b) Steps taken to formulate, implement, publish and update national and regional programmes, strategies and measures, policy frameworks (e.g. national adaptation plans) and other relevant information;
(c) Implementation of adaptation actions identified in current and past adaptation communications, including efforts towards meeting adaptation needs, as appropriate;
(d) Implementation of adaptation actions identified in the adaptation section of NDCs, as applicable;
(e) Coordination activities and changes in regulations, policies and planning.

111. Developing country Parties may also include information on, as appropriate, implementation of supported adaptation actions, and the effectiveness of already implemented adaptation measures.

Figure 11 Section E, chapter IV of the Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement document. UNFCCC (2019a).

The core question posed by section E is: What is the implementation status of the adaptation actions planned by your country?

The main purpose of section E is to ensure that A-BTRs include updated information about the implementation status of the planned adaptation actions reported on in the document. Reporting here could use indicators as a way to provide the report’s audience with a clear indication of an action’s implementation status. These indicators could either be included as standalone pieces of information or could form part of a more rounded qualitative description of the progress that has been made towards implementing the adaptation action in question. In selecting these indicators, authors could opt to use indicators that are specific to the adaptation action being reported on. Such indicators could describe the milestones reached by the action (e.g. 6km of sea wall constructed, adaptation-relevant law drafted) and/or the outputs it has delivered (e.g. sea wall fully constructed, adaptation-relevant law enacted). Alternatively, authors could also opt for a more simplified approach, such as utilizing simple but descriptive categories as qualitative indicators that are comparable across actions. An example of such categories could be ‘just begun’, ‘early phase of implementation’, ‘advanced phase of implementation’, and ‘completed’.

In addition to the above, for actions that could be categorised as a programme, strategy, policy framework, or similar (i.e. any other actions that are long-term processes, designed to periodically updated), request (b) in the guidance asks authors to provide information about the steps that have been “taken to formulate, implement, publish and update” them. The specific reference to “national adaptation plans” as an example of a relevant action, means that for countries that are undertaking them, NAP processes should be considered as the primary target of this request. This however, should not dissuade these countries, or other countries, from reporting on other relevant adaptation programmes, strategies and measures, policy frameworks, etc., in this manner.

In light of this request, authors should aim to provide a description of the entire process of formulating, executing, and updating the relevant action. For a NAP or similar adaptation programme for example, this would likely involve describing its preliminary phases (i.e. laying the groundwork for-, and addressing gaps towards establishing programme) all the way through to the phases which constitute the end of its cycle (i.e. evaluating the results and updating the programme).17

17 A sample process containing the various steps and stages that could make-up the process of formulating and implementing an adaptation programme can be seen in this information paper released by LDC Expert Group’s (2018, p.10–11). While this sample process has been specifically designed for NAPs, the process itself is relatively generic and thus could be equally applicable to non-NAP processes.
Given that the information related to activity reporting requested across sections D and E are clearly related, it would seem logical to integrate these into a single section in which adaptation actions would be described and reported upon on simultaneously. In addition, it may also be possible to report on the outcomes and impacts of adaptation actions (requested by section F) in this section. However, as is expanded on in Box 10, section F, the ability of authors to do this will be dependent on the country’s ability to attribute outcomes and impacts to the specific interventions reported on here.

The supplementary question posed by section E is:

How much of your country’s adaptation programme has had international support and how effective have supported actions been?

These questions are posed by paragraph 111, which is one of two places in the guidance that uses the prefix ‘may’ instead of ‘should’, signalling that the request it makes is ‘more voluntary’ than the majority of other requests made by the guidance. The paragraph itself asks developing countries to report on the progress of adaptation actions which are being, or have been implemented, using international support, and provide information regarding how effective these actions have been in addressing the country’s climate challenges (see box 11 in section F for a definition of ‘effectiveness’ in this context).

Countries following the guidance provided in sections E and F should find that that information about progress towards implementation of supported adaptation actions and their results (including a measure of how effective they have been) would be reported on within the A-BTR anyway – albeit without being distinguished as either actions that have been implemented with international support or actions that have been implemented without international support. As such, developing countries that are interested in making this information readily available in their reports could do so by finding a simple way to distinguish externally supported actions from domestically supported actions. This could, for example, be achieved by having separate sections for reporting on supported actions and reporting on non-supported actions, or by highlighting actions that are externally supported within the general reporting format adopted.
In addition to the question directly posed by paragraph 111, developing countries could, if they so wish, use the provision of information about international support and its effectiveness as an opportunity to provide an additional commentary about the (in)adequacy of the international support they have received for adaptation action (i.e. is the support-provided enough given the size of the climate challenges they are facing?).

Ideally, any commentary provided on adequacy would be evidence-based, using the information about externally supported adaptation to support its narrative. Whether adaptation support is adequate or not is determined by the extent to which the support provided meets the recipient country’s adaptation support needs. Therefore, evidence-based commentaries would need to make references to the implementation status, results (i.e. outcomes and impacts), and effectiveness of adaptation actions supported by external parties. Acknowledging that in this context establishing adequacy is not a precise science, any commentary provided could be done in the form of a loose evaluation that contrasts the overall results of supported actions (i.e. implementation status, outcomes and impacts, and effectiveness in achieving its objectives) against the country’s national circumstances, its vulnerability to climate change, and its national adaptation priorities as the basis for its key points. Furthermore, if applicable, countries might also want to discuss any potential misalignment between the objectives of support provided and their national adaptation priorities and adaptation support needs.

For developing countries, including a commentary about the adequacy of the support received could represent an opportunity to communicate the extent to which the support they have received is adequate in light of the challenges they face and, if applicable, to emphasize where and why more support is urgently needed. Furthermore, through the process of highlighting the results and effectiveness of supported actions, countries could brand themselves as competent and transparent partners and therefore increase their attractiveness to potential donors.
Section F: Monitoring and evaluation of adaptation actions and processes

112. In order to enhance their adaptation actions and to facilitate reporting, as appropriate, each Party should report on the establishment or use of domestic systems to monitor and evaluate the implementation of adaptation actions. Parties should report on approaches and systems for monitoring and evaluation, including those in place or under development.

113. Each Party should provide the following information, as appropriate, related to monitoring and evaluation:
   (a) Achievements, impacts, resilience, review, effectiveness and results;
   (b) Approaches and systems used, and their outputs;
   (c) Assessment of and indicators for:
      (i) How adaptation increased resilience and reduced impacts;
      (ii) When adaptation is not sufficient to avert impacts;
      (iii) How effective implemented adaptation measures are;
   (d) Implementation, in particular on:
      (i) Transparency of planning and implementation;
      (ii) How support programmes meet specific vulnerabilities and adaptation needs;
      (iii) How adaptation actions influence other development goals;
      (iv) Good practices, experience and lessons learned from policy and regulatory changes, actions and coordination mechanisms.

114. Each Party should provide information related to the effectiveness and sustainability of adaptation actions, as appropriate, including on:
   (a) Ownership, stakeholder engagement, alignment of adaptation actions with national and subnational policies, and replicability;
   (b) The results of adaptation actions and the sustainability of those results.

Figure 12. Section F, chapter IV of the Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement document. UNFCCC (2019a).
The core question posed by section F is:

What are the outcomes and impacts of the adaptation actions for your country has implemented?

The main purpose of section F is to ensure that A-BTRs include information about the outcomes and impacts (i.e. the results) of adaptation actions. Presenting the results of adaptation efforts represents the final stage of reporting on the adaptation process in the A-BTR, and will provide the report’s audience with an indication of the outcomes and impacts achieved by individual adaptation actions, and/or the outcomes and impacts of the country’s national adaptation process as a whole.

Results of adaptation presented in the A-BTR should be determined by monitoring and evaluation (M&E) processes. When M&E systems are able to produce such data, information presented would include quantitative indicators to complement qualitative data and descriptions. However, in many cases, the metrics through which such quantifications can be conducted will be unclear, will be context specific, or will only provide an indirect measure for the ultimate intended impact (i.e. increased resilience, reduced vulnerability and enhanced adaptive capacity).18 Purely qualitative descriptions of outcomes and impacts may, therefore, suffice whenever appropriate quantitative data is not available. Regardless of the approach taken to presenting results (i.e. via quantitative indicators, qualitative descriptions, or both), authors should make concerted efforts to ensure that any results presented are accompanied with baseline data (qualitative or quantitative) in order to ensure that the audience is able to gauge the significance of the results being presented.19

In general, it is anticipated that the majority of information provided in the A-BTR would be derived from M&E processes that form part of the broader national system for M&E adaptation. As such, the information that countries are able to provide here will largely depend on the characteristics and capabilities of their national M&E system for adaptation.20

However, as expanded on in Box 10 below, national M&E systems for adaptation are incredibly diverse in terms of how they approach the task of monitoring and evaluating adaptation, including with regards to the variables they actually monitor and evaluate. The variables that M&E systems monitor and evaluate ultimately determines the nature and scope of the information they are able to generate, including its ability to attribute the changes in indicators of outcomes and impacts it is monitoring and/or evaluating to the implementation of individual actions. As a result, not all national M&E systems are able to determine both the results of individual adaptation actions and the progress being made in adaptation priority areas equally well. Meanwhile, some national M&E systems with a more limited scope will be unable to track either of these variables, namely those that only monitor ‘progress made in implementing planned adaptation actions’.

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18 A more comprehensive discussion of issues with metrics for adaptation can be found e.g. in Christiansen, Martinez, & Naswa, 2018 and Leiter et al. (2019).
19 Baseline data is the term used to describe the data collected before an intervention is implemented. Its collection enables those undertaking M&E processes to compare the situation before and after an action’s implementation and as such, it is a fundamental prerequisite for measuring outcomes and impacts effectively.
20 At the time of writing, national M&E systems for adaptation are far from widespread amongst countries and there are presently only a handful of countries with national M&E systems that are operational to any degree. Furthermore, while many countries have shown interest in establishing a national M&E system for adaptation, there is no guarantee that all countries will judge the benefits of a national M&E system to outweigh its costs. This may be the case if countries implement adaptation at the sub-national level and/or if they do not mention monitoring and evaluating adaptation in their NDC.

As a result, A-BTR authors may find that – at least in its initial iterations – information about outcomes and impacts of implemented adaptation comes from ad hoc M&E processes (i.e. those attached to donor supported adaptation projects and programmes) or M&E systems that are not operating at the national-level (e.g. sub-national, municipal, or sectoral). (Hammill et al., 2014; Leiter et al., 2017; Vallejo, 2017).
Varying capabilities of national M&E systems to monitor and evaluate adaptation

National M&E systems can be incredibly diverse in their approaches to monitoring and evaluating adaptation. Approaches used by national systems generally rely on relevant indicators to monitor one or more of the variables associated with the adaptation process. These can include:

(i) Changes and trends in exposure and vulnerability to climate-related hazards;
(ii) Progress made in implementing planned adaptation actions (as requested in section E);
(iii) Results (outcomes and impacts) of adaptation actions (as requested in this section);
(iv) Financial and non-financial resources spent on adaptation initiatives. (Hammill et al., 2014; Vallejo, 2017).

On top of monitoring the variables above, national M&E systems can also be designed to evaluate key questions associated with adaptation. Such key questions could include:

(i) Are adaptation action(s) on track to meet their pre-defined objectives (i.e. the outcomes and impacts they were intended to have when planned), and why/why not?
(ii) Are the resources being efficiently allocated?
(iii) Are adaptation action(s) effectively reducing climate risks, and how are they doing this? (Hammill et al., 2014; Vallejo, 2017).

What an M&E system is established to do will ultimately have implications on the outputs that the system is able to generate (i.e. the information that M&E systems are able to produce). For example, a system that only monitors progress made in implementing planned actions will not generate information about the outcomes and impacts of these actions. Meanwhile, M&E systems that monitor ‘changes and trends in exposure and vulnerability to climate-related hazards’ will be able to measure progress being made towards adaptation targets and goals in given (priority) areas, however without also monitoring the results of individual actions, they will be unable to attribute monitored changes to specific actions.

The decision as to what a national M&E system monitors and/or evaluates and how it approaches this will be based on, amongst other things, the motivation for monitoring and evaluating adaptation, and what is deemed to be possible to achieve in light of data availability, resource intensity, etc. (OECD, 2015). At present, most national M&E systems, operational and under-development, are more orientated to monitoring variables than they are to evaluating adaptation (Vallejo, 2017).

The outputs that a national M&E system is able to generate will naturally have implications for the format through which authors are able to present adaptation results in the A-BTR. As discussed in Box 8, where authors are able to attribute specific outcomes and impacts to specific actions, the results of M&E processes could be presented alongside descriptions of individual actions and updates about their implementation, i.e. the information requested by sections D and E. However, where this is not possible, the results of M&E processes would instead need to be presented in a separate section of the A-BTR that is associated to, but not integrated with, the descriptions of actions planned and their implementation status.
Out of the three concepts requested, evaluating the sustainability of adaptation is likely to be the most difficult for countries. Ideally, sustainability would be provided by describing how the results of adaptation have changed over time. Providing this information requires that actions have been periodically monitored over multiple monitoring periods, which in many cases, may not be possible due to limited resources for M&E activities and/or because insufficient time has passed between implementation and reporting to allow for multiple cycles of M&E. If this information is unavailable, authors could instead provide descriptive information about any precautionary measures taken during the planning and implementation phases of adaptation that were intended to improve the sustainability following, or during, its implementation. While not providing insights into whether adaptation is actually sustainable, it will demonstrate to the report’s audience that sustainability has been considered in the planning and implementation processes.

The first supplementary question posed by section F is:

How effective and sustainable have these implemented adaptation actions been, and how replicable are they?

In addition to providing updated information about the monitored outcomes and impacts of implemented adaptation actions, section F asks countries to provide additional information that reflects upon the ‘effectiveness’ of adaptation actions and the ‘sustainability’ of their results, and their ‘replicability’.

Information presented in the A-BTR should stem from evaluation components of M&E processes, in which evaluations of effectiveness, sustainability, and replicability are based on a combination of the information monitored (i.e. information the requested above) but also draw upon information provided by additional processes, e.g. expert reviews and stakeholder consultations (Vallejo, 2017). Offering reflective information concerning these concepts should provide the audience with a more holistic understanding of the various successes and failings of adaptation actions and/or the adaptation process as a whole. In line with this, where M&E systems allow, authors might also consider providing evaluations of other similar concepts not explicitly mentioned in section F, e.g. efficiency, that indicate different-but-related facets of what constitutes successful adaptation.

**BOX 11**

**Defining effectiveness, efficiency, sustainability, and replicability**

The **effectiveness** of adaptation refers to the extent to which an adaptation action or adaptation process has achieved its pre-defined objectives. For adaptation actions, these objectives are likely to refer any pre-defined outcomes and impacts they were intended/expected to achieve when they were initially planned. For adaptation processes meanwhile, these objectives are likely to refer to top-line goals and targets that are associated with a country’s priority areas for adaptation (i.e. those requested in section C).

The **efficiency** of adaptation refers to the ratio between the benefit gained and the costs of implementation (generally described in terms of economic cost).

The **sustainability** of adaptation refers to the ability of an action or intervention to continue to achieve its desired outcomes and impacts over medium- to long-time horizons. In theory, being sustainable is key for adaptation to be considered as successful, as adaptation that fails to be effective beyond the short-term can hardly qualify as ‘adaptation’ in any meaningful sense. In practice however, ensuring sustainability in projects and programmes is a significant challenge, particularly in the period after their initial lifecycles, where funding and responsibilities typically end.

The **replicability** of adaptation refers to the potential for it to be repeated, expanded, or scaled-up, while continuing to be effective in achieving its pre-defined objectives.

As part of describing the various results of evaluations into the effectiveness, sustainability, and replicability of adaptation, section F also asks for information about how the good practices of ‘providing ownership’, ‘undertaking stakeholder engagement’, and ‘aligning of adaptation actions with national and subnational policies’, have contributed to adaptation being effective, sustainable, and/or replicable. While this list is far from exhaustive, these practices are all means of enhancing the results of adaptation and ensuring its longer-term sustainability. Therefore, where the results of evaluation processes allow, authors could include descriptions of how integrating these good practices – as well as others not mentioned in section F – into adaptation planning and implementation have contributed to the effectiveness, sustainability, and replicability of adaptation being reported on.

21 Out of the three concepts requested, evaluating the sustainability of adaptation is likely to be the most difficult for countries. Ideally, sustainability would be provided by describing how the results of adaptation have changed over time. Providing this information however, requires that actions have been periodically monitored over multiple monitoring periods, which in many cases, may not be possible due to limited resources for M&E activities and/or because insufficient time has passed between implementation and reporting to allow for multiple cycles of M&E. If this information is unavailable, authors could instead provide descriptive information about any precautionary measures taken during the planning and implementation phases of adaptation that were intended to improve the sustainability following, or during, its implementation. While not providing insights into whether adaptation is actually sustainable, it will demonstrate to the report’s audience that sustainability has been considered in the planning and implementation processes.
Reporting adaptation through the biennial transparency report

The second supplementary question posed by section F is:

What are the capacities, capabilities, and characteristics of your national M&E system for adaptation?

In addition to reporting on the results of adaptation, section F also asks countries to provide descriptive information about their national M&E systems for adaptation, or their plans to establish a system for M&E on adaptation. Information requested about national M&E systems for adaptation can be viewed as taking place on two levels:

- A general level, in which countries are asked to provide a general overview of their national M&E systems, which would include information about its overall capacities, capabilities, and characteristics.
- A specific level, in which countries are asked to provide technical information relating to how specific adaptation outcomes and impacts (e.g. decreases in vulnerability, and increases in resilience and adaptive capacity) are measured and assessed.

The purpose of providing a general overview of the national M&E system for adaptation within the A-BTR is to inform its audience about the reporting country’s capacities and capabilities for monitoring and evaluating adaptation. Providing a well-rounded description of the national M&E system should enable the report’s audience to understand to what extent the reporting country is able to monitor and evaluate the results of adaptation. Just as importantly, it also allows them to understand what reporting countries are unable to determine through their M&E systems and, if applicable, where support is needed to increase its capacity for M&E.

To provide this understanding, well-rounded descriptions of national M&E systems should answer a variety of key questions about the system, relating its objectives, how it is structured and operates (e.g. which institutions are involved, is it integrated with or built upon other M&E systems), what exactly it monitors and evaluates, its required inputs (e.g. financial and human resources), and its outputs. Given the variation in information needed to answer these questions, authors might wish to find a structured way of providing a condensed summary of their national M&E system that enables the audience to understand the system’s core elements.

Useful examples:

The Context, Processes, Content Framework presented in Hammill et al. (2014, p.8–20 and p.31–70)

In their review of national monitoring and evaluation systems for adaptation, Hammill et al. (2014) present overviews of ten M&E systems using a relatively simple but effective structure. Based on their ‘context, processes, content framework’, these overviews provide highly informative four-page summaries that provide the reader with the:

- Context – i.e. the background policy context and purpose(s) for establishing the system;
- Processes – i.e. the institutional arrangements, processes, and resources and capacities required to establish and operationalise the system;
- Content – i.e. the approaches used to track adaptation, the data and information required to measure progress, and the outputs and associated reporting processes used to share the analyses.

While the structure provided by Hammill et al. (2014) may not necessarily cover every dimension of a national M&E system that countries may wish to describe in their A-BTR, the structure applied by this report could prove to be a starting point for countries looking to provide something similar.
For countries that are in the process of establishing a national M&E system for adaptation, but have not yet reached a level of development where describing the planned system in this manner makes sense, authors might consider instead providing a free narrative describing what has been done so far, and what they are still planning to do. If appropriate, any free narrative supplied here could also be utilised as an opportunity to outline any support needs that the implementing country has in order to establish and operate its planned M&E system.

The purpose of providing technical descriptions of how specific outcomes, impacts, and concepts are measured and evaluated is to provide transparency to the results of adaptation reported on in the A-BTR document and to enable the audience to understand how the results and evaluations presented within the report are determined and, in turn, to better understand the significance of the results being provided. To adequately provide the information necessary to achieve this, technical descriptions could include:

- Descriptions of the indicators used to monitor the outcomes and impacts of adaptation, and assessment methodologies used to evaluate, amongst other things, its effectiveness, efficiency, sustainability, and replicability;
- An account of how indicators and assessment methodologies were designed – i.e. how, why, when, and by whom, were indicators and assessment processes designed – and;
- Descriptions of any assumptions upon which the indicators and assessment methodologies are based, and the limitations associated with these assumptions.

**BOX 12**

**Cross-referencing to reports describing national M&E systems and indicator factsheets**

For authors, providing detailed technical descriptions within the A-BTR document for each outcome/impact monitored and evaluated by their national M&E system could prove to be unpractical for the report’s authors and its audience, particularly for those with national M&E systems that have use many indicators (some national systems can include over 100 indicators). To avoid these impracticalities, authors may again find it beneficial to use cross-referencing to direct readers to the relevant information, if it is publically available elsewhere. To this end, some national M&E systems for adaptation (typically those that are relatively well developed) possess associated reports and/or collections of ‘indicator factsheets’ that catalogue and describe the various outcomes and impacts being monitored by the national M&E system for adaptation.

**Further reading:**

To gain a further understanding regarding the various forms of national-level M&E systems that presently exist for adaptation, practitioners may find the aforementioned report ‘Monitoring and Evaluation Adaptation at Aggregated Levels: A Comparative Analysis of Ten Systems’ by Hammill et al. (2014) a useful starting point. The report compares and analyses ten M&E systems operating at aggregated levels (eight of which are operated at the national level), highlighting structural differences in the way they are set-up, and the impact this has on their capacities and limitations. Furthermore, the report also provides actors interested in setting up their own national M&E system with key lessons and recommendations from the processes undergone by the countries included in its analysis.

Additionally, ‘Insights from National Adaptation Monitoring and Evaluation Systems’ by Vallejo (2017) also provides a good overview of the status of national approaches to M&E adaptation, including gaps, challenges, and limitations they presently face.

Practitioners seeking a more empirical instructions for, and insights into, the process of establishing domestic M&E systems for adaptation however, are directed to:

- “Setting up a national monitoring system for climate change impacts and adaptation” by van Ruth and Schönenthaler (2016 p.97)
- “Development of national and sub-national adaptation metrics: lessons from Kenya” by Karani (2016 p.113)
- “Chapter 4: Country-specific assessments of adaptation progress” by Leiter et al. (2017 p.23)
Section G: Information related to averting, minimizing and addressing loss and damage associated with climate change impacts

115. Each interested Party may provide, as appropriate, information related to enhancing understanding, action and support, on a cooperative and facilitative basis, to avert, minimize and address loss and damage associated with climate change impacts, taking into account projected changes in climate-related risks, vulnerabilities, adaptive capacities and exposure, including, as appropriate, on:

(a) Observed and potential climate change impacts, including those related to extreme weather events and slow onset events, drawing upon the best available science;
(b) Activities related to averting, minimizing and addressing loss and damage associated with the adverse effects of climate change;
(c) Institutional arrangements to facilitate the implementation of the activities referred to in paragraph 115(b) above.

Figure 13. Section G, chapter IV of the Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement document. UNFCCC (2019a).

Section G provides guidance for countries to report on loss and damage that results from climate change. Loss and damage is a relatively new addition to the UNFCCC landscape and one that has proved controversial amongst member countries of the UNFCCC (Box 15 at the end of this section provides a brief explanation of what the term loss and damage refers to, and why it has been controversial under the UNFCCC). In light of these two factors, providing information requested by section G is considered ‘more voluntary’, using the prefix ‘may’.

Although, as outlined later in Box 15, there is a disconnect between the UNFCCC’s official understanding of loss and damage, and how it is understood by developing countries, NGOs, and much of the research community, this should not hamper country efforts to report on loss and damage, if the reporting country desires to do so. To avoid any potential confusion, authors reporting on loss and damage could outline their official understanding of loss and damage in their A-BTR document, and ensure that this understanding is applied consistently throughout.

The first core question posed by section G is:

What losses and damages have been, or are anticipated to be, incurred by your country as a result of climate change?

The first aspect of section G asks countries to provide information on “observed and potential climate change impacts, including those related to extreme weather events and slow onset events”. As section B has already asked countries to provide information about overall climate trends (including hazards, e.g. extreme weather events) and their associated impacts, information relevant to this request, that is not covered by the requests made in section B, could include descriptions of past losses and damages incurred as a result of climate change, and descriptions of the losses and damages that are expected to be incurred in the future. Any descriptions provided here would ideally be based upon the results of assessments (e.g. post-disaster needs assessments) and the results of modelling exercises, respectively.
To provide a comprehensive overview, descriptions of past and projected losses and damages would ideally consider economic and non-economic losses and damages of both extreme weather events and slow-onset events. However, due to the practical difficulties associated with measuring and projecting non-economic losses and/or losses and damages from slow-onset events (see Box 13 below), authors, in particular those from developing countries, may find that the assessments and models that should inform these descriptions may be largely limited to focusing on the economic costs associated with extreme weather events, if they are available at all.22

In addition to domestic sources of data, authors interested in reporting on the economic impacts of loss and damage could source data from publicly available tools and databases. Munich Re’s NatCatSERVICE is one such database that has can provide users with data on natural catastrophes from 1980 onwards, as well as enabling users to visualise the data across in a variety of ways: https://www.munichre.com/en/solutions/for-industry-clients/natcatservice.html

BOX 13

**Practical difficulties in reporting on loss and damage**

**Economic and non-economic costs:** Loss and damage can be considered to have economic and non-economic costs. Economic costs are those which can be measured using a monetary value, i.e. marketable goods and services. Meanwhile, non-economic costs are those that are not typically marketed, i.e. human life, heritage, and biodiversity, and thus cannot be easily quantified with a monetary value. While still relatively new, the development and application of methodologies for estimating economic losses due to climate change is ongoing. Similar progress in estimating non-economic losses however, is presently very limited and as such, available methodologies suitable for wide-spread application by countries are few and far between.

**Lack of data and inherent uncertainties:** A lack of suitable data is a key constraint to estimating the present and future losses and damages associated with climate change. This is particularly pertinent when assessing non-economic loss and damage and/or those associated with slow-onset events, the long-time horizons of which create significant issues relating to amplified uncertainties within assessment methodologies.

The result of these practical issues is that cost estimates have a tendency of being selective with regards to their focus and therefore often fail to account for the whole picture. Furthermore, most methodologies are limited to focusing on the direct costs associated with a specific impact and therefore systematically ignore indirect costs that can be significant, e.g. the impact that funding disaster relief efforts has on other aspects of the national budget.

*Based on information provided in Puig et al. (2019).*

The second core question posed by section G is:

**What is your country doing to manage present and future losses and damages?**

The second aspect of section G asks countries to describe activities related to managing loss and damage, with the term ‘managing’ used here to refer to actions that avert (i.e. completely avoid), minimize, and/or address (i.e. deal with the after effects of) loss and damage related to climate change. Providing this information will probably take a similar format to that used to describe and report on adaptation actions. However, while the question of how to present this information is notionally straightforward, identifying what activities constitute managing loss and damage could be more tricky. This is particularly the case when trying to distinguish between what actions count as managing loss and damage, and what actions count as adaptation.23

*22 In addition to domestic sources of data, authors interested in reporting on the economic impacts of loss and damage could source data from publicly available tools and databases. Munich Re’s NatCatSERVICE is one such database that has can provide users with data on natural catastrophes from 1980 onwards, as well as enabling users to visualise the data across in a variety of ways: https://www.munichre.com/en/solutions/for-industry-clients/natcatservice.html*

*23 It has been observed that many countries possess NAPs, national communications, and national disaster risk reduction (DRR) strategies, that include actions and policies that could be framed as managing loss and damage (Puig et al., 2019).*
What actions could constitute averting, minimizing, and addressing loss and damage?

Activities for managing loss and damage can usually be distinguished based on their applicability to extreme weather events or slow-onset events as striking differences in their time horizons of these two types of event mean that approaches and measures designed to manage the losses and damages they cause often differ significantly in order to allow them to meet the different challenges posed.

Measures for managing the economic aspects of loss and damage incurred due to extreme weather events are generally risk-based and can be further categorised as being risk reduction-, risk retention-, or risk transfer-orientated. Risk reduction measures are those that reduce exposure and vulnerability, and increase resilience. These can include engineered solutions (i.e. construction of dams, flood levies, and evacuation shelters) and non-structural measures associated with disaster planning (i.e. early warning systems, contingency plans, and encouraging behavioural change). Risk retention measures can be considered as those that enable the country to ‘self-insure’ against climate stressors, either by building up resilience in the population (i.e. through social protection) or through financial means (i.e. creating reserve/catastrophe funds for offsetting unexpected climate-related financial burdens). Risk transfer measures are those that shift (usually financial) risk from one party (i.e. country or sub-entity) to another (i.e. an insurer). Typical risk transfer measures include: insurance, catastrophe bonds, conditional risk transfer, and combined insurance-credit programmes.

Slow-onset events meanwhile, are typically harder to identify as their long time horizons mean that their links to climate stressors are relatively weak. Puig et al. (2019) suggests that activities can fall into two broad categories: ‘institutional arrangements’ aimed at aligning cooperation amongst agencies and other stakeholders in performing tasks such as the assessment of current and emerging climate stressors, to formulating policy and enacting legislation. Alternatively, these can also be manifest through ‘governance schemes’ designed to manage anticipated gradual changes in resources (i.e. land, water) and/or deal with the socio-economic consequences of these changes (i.e. migration).

Based on information provided in Puig et al. (2019).

While the guidance provided in section G does not explicitly ask countries to report on the status and results of actions aimed at managing loss and damage as it does for adaptation in sections E and F. Countries that have the capability and desire to provide this information should not be discouraged from doing so.

A supplementary question posed by section G is:

What institutional arrangements exist to facilitate the management of loss and damage?

In addition to describing activities related to managing loss and damage, section G asks authors to provide descriptions of institutional arrangements that exist to facilitate the management of loss and damage. For countries with pre-existing institutional arrangements with relevance to loss and damage, authors could present these arrangements in a similar manner to how they present institutional arrangements related to adaptation (requested in section A).
Useful examples:

Examples of the initial attempts by countries to present information related to loss and damage can be seen in Santa Lucia’s NAP 2018–2028 (chapter 15, p. 126–135) and El Salvador’s National Climate Change Plan (in Spanish) (section V, area for action 2 p. 25–30).

Santa Lucia’s NAP provides a good example of how a country is able to outline its understanding of loss and damage by acknowledging what it considers ‘limits to adaptation’ to mean (see p. 126). Furthermore, the NAP has made an initial attempt to frame itself within the context of loss and damage. In the absence of reliable long-term data however, Santa Lucia’s NAP uses “simple physical reasoning” to highlight potential causes of loss and damage. In doing this, Santa Lucia have negated the need for applying more detailed and rigorous methodologies, although this has come at the cost of indicative estimates with regards to the magnitude of expected loss and damage, and a means of comparison between the potential causes of loss and damage. However, it has provided the country with a rudimentary means of identifying and communicating the potential hazards and trends that are expected to cause loss and damage in the future. With regards to activities to manage loss and damage, Santa Lucia’s NAP only goes as far as outlining a potential series of measures. Although this does not represent a concrete plan per se, it does represent the basis for planning action in the future.

El Salvador’s National Climate Change Plan includes loss and damage as a specific area for action within its national climate change plan (which covers mitigation, adaptation and loss and damage relevant actions). It outlines a number of planned measures aimed at reducing loss and damage via risk-reduction, risk-transfer, and risk-retention. The outlining of such planned measures represents the next step from the ‘potential measures’ presented in Santa Lucia’s NAP.

Simple physical reasoning is where specific impacts are related to the known effects of climate change on the drivers of hazards. For example, the global average increase in temperature since pre-industrial times is known to have increased sea levels and sea-surface temperatures and also resulted in variations to precipitation patterns, all changes that result in increased intensity of hurricanes and a resultant increase in damages. Thus, impacts associated with high-intensity hurricanes may be classified as loss and damage using simple physical reasoning.
What is loss and damage and why is it controversial under the UNFCCC?

The term loss and damage is often understood to refer to the impacts of climate change, including those related to extreme weather events and slow-onset events. Within this understanding, ‘loss’ and ‘damage’ can either be treated as largely synonymous terms, or two individual terms that operate in tandem, where ‘loss’ refers to adverse impacts that are permanent (i.e. are unrepairable/lost) and ‘damage’ refers to adverse impacts that are not necessarily permanent (i.e. are repairable/recoverable) (UNFCCC, 2013a; Schäfer & Kreft, 2014; Stabinsky & Hoffmaister, 2015).

However, the applicability of the term is understood in two broad ways. The first understanding is that loss and damage refers to the adverse impacts of climate change upon human and natural systems. In this interpretation, no differentiation is made between ‘climate change impacts’ and ‘loss and damage due climate change’. The second understanding is that loss and damage refers to impacts that are unavoidable due to a failure of mitigation to reduce climate impacts, and the magnitude of climate impacts incurred exceeding the limits of what can be adapted to (van der Geest & Warner, 2015). While the latter interpretation is gaining traction amongst academics and practitioners, it is the former that is being applied by the UNFCCC who provide the term with the working definition “the actual and/or potential manifestation of impacts associated with climate change in developing countries that negatively affect human and natural systems” (UNFCCC, 2012 p.3).

Within the UNFCCC, addressing loss and damage has been historically difficult due to the implied liability, which developed countries have interpreted as potential grounds for compensation, i.e. loss and damage due to climate change is being suffered by those least responsible for the emissions that have directly caused climate change (Huq, 2014; Pidcock & Yeo, 2017). For developed countries, this liability is seen as being particularly implied by the second interpretation’s reference to ‘unavoidable’ impacts of climate change, which acknowledges that impacts being felt by developing countries are beyond adaptation and as such, any loss and damage incurred by developing countries is incurred due to the failure of mainly developed countries to mitigate their emissions.

The reluctance of developed countries to approve loss and damage being formalised under the UNFCCC has meant that it only made its first formal appearance under the UNFCCC following COP18, when the Warsaw Implementation Mechanisms (WIM) was established. Although the WIM acknowledges in the preamble that “loss and damage associated with the adverse effects of climate change includes, and in some cases involves more than, that which can be reduced by adaptation” (UNFCCC, 2013b p.6), under the WIM, loss and damage is defined using the above UNFCCC working definition, meaning that conceptually and politically, it is considered a sub-component of the UNFCCC’s adaptation pillar. The Paris Agreement has somewhat rectified this by formally distinguishing loss and damage as its own ‘pillar’ within the Paris Agreement, separate from both mitigation and adaptation (most obviously signalled by the fact it has its own paragraph in the Paris Agreement). However, this move has not led to the formal recognition that loss and damage refers to the unavoidable impacts of climate change, as associated with the second broad interpretation of the term.

Further reading:

Whilst literature focussing on loss and damage is growing, resources that provide practitioners responsible for reporting loss and damage with tangible guidance and insight is very limited. The policy brief “Loss and Damage in the Paris Agreement’s Transparency Framework” by Puig et al. (2019) however, represents an exception to this, and should provide readers with an expanded and more in-depth overview of reporting loss and damage and the practical issues and limitations in doing such, than can be provided here.

Practitioners seeking a more in-depth understanding of loss and damage within the UNFCCC are directed to articles:

*“Coming full circle: the history of loss and damage under the UNFCCC”* by Roberts and Huq (2015)

*“From Paris to Marrakech: Global Politics around Loss and Damage”* by Taub et al. (2016)
Section H: Cooperation, good practices, experience and lessons learned

Each Party should provide the following information, as appropriate, related to cooperation, good practices, experience and lessons learned:

(a) Efforts to share information, good practices, experience and lessons learned, including as they relate to:
   (i) Science, planning and policies relevant to adaptation;
   (ii) Policy innovation and pilot and demonstration projects;
   (iii) Integration of adaptation actions into planning at different levels;
   (iv) Cooperation to share information and to strengthen science, institutions and adaptation;
   (v) Area, scale and types of cooperation and good practices;
   (vi) Improving durability and effectiveness of adaptation actions;
   (vii) Helping developing countries to identify effective adaptation practices, needs, priorities, and challenges and gaps in a way that is consistent with encouraging good practices;

(b) Strengthening scientific research and knowledge related to:
   (i) Climate, including research and systematic observation and early warning systems, to inform climate services and decision-making;
   (ii) Vulnerability and adaptation;
   (iii) Monitoring and evaluation.

The core question posed by section H is:

What activities has your country undertaken or participated in that support domestic or international adaptation processes?

The main purpose of section H is to ensure that A-BTRs provide information about activities/actions that support adaptation processes in some capacity. While the scope of such activities/actions that would qualify as this is potentially large, the guidance provided by section H explicitly seeks activities that fall into the two broad but clear themes:

- Collaboration and knowledge-sharing activities, addressed by (a), and;
- Activities that enhance of scientific knowledge and/or capacity to collect adaptation-relevant data, addressed by (b).

For the first ‘theme’, countries are being asked to report on the actions it either plans to undertake, is undertaking, or has undertaken, that involve collaborating with, and/or sharing information, good practice, experience, and lessons learned with, external parties. Relevant actions could include participating in regional programmes and cross-border initiatives, and collaborating with non-state entities such as research institutions, private sector organisations, and intergovernmental agencies, in which the sharing and co-development of knowledge (i.e. experiences, lessons learned, good practices) is a core theme/purpose of the collaboration. The non-exhaustive list provided in (a) of the guidance (see sub-points i–vii) suggests that collaborative/knowledge-sharing activities to be reported on can be relevant to almost all types of adaptation activities. Therefore, authors should consider reporting on all forms of cooperation/knowledge-sharing that are deemed to have meaningful relevance to adaptation.
For the second ‘theme’, countries are being asked to provide information about actions it either plans to undertake, is undertaking, or has undertaken, that either increase the country’s knowledge and scientific understanding of a range of fields directly related to adaptation (e.g. research projects and vulnerability assessments), or increase the capacity of the country to generate relevant data that may in turn lead to higher quality scientific research and knowledge generation (e.g. activities that enhance a country’s capacity to collect data required for early warning, climate modelling, or monitoring and evaluation).

As the information requested by section H essentially amount to activity reporting, it would be logical that information included in the A-BTR is presented in a similar, if not the same, format as adaptation actions and measures designed to manage loss and damage. This would include providing a description of the activities planned and, if applicable, the implementation status and results. When doing this however, it might be preferable to find a way of distinguishing these activities as separate from the adaptation actions and measures to manage loss and damage.

**Including descriptive information about the actual good practices established and lessons learned during your country’s national adaptation process**

In addition to reporting on the act of “sharing of information, good practices, experience and lessons learned” as requested by (a) in this section of the guidance, authors could also choose to provide descriptions of any good practices established, interesting experiences had, and/or lessons learned during the implementation of their national adaptation process so far, that they wish to communicate to the wider community. Information relevant for including in such a manner could come from any aspects of the national adaptation process, including: the modelling of climate change and its impacts, the adaptation planning processes, the laying of the groundwork for adaptation (i.e. enhancing the enabling environment), and the implementation of on-the-ground adaptation. Furthermore, it could also stem from actions aimed at monitoring and managing loss and damage.

Although this is not explicitly asked for by the guidance in section H, providing material to this effect will enable countries to use the A-BTR as a means of sharing potentially useful information with an international audience that could contribute to the global pool of knowledge relating to adaptation and climate impacts. Furthermore, by doing this developing countries might more easily gain recognition for aspects of their national adaptation process that has been particularly successful.
Section I: Any other information related to climate change impacts and adaptation under Article 7 of the Paris Agreement

117. Each Party may provide, as appropriate, any other information related to climate change impacts and adaptation under Article 7.

Figure 15. Section I, chapter IV of the Modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement document. UNFCCC (2019a).

The core question posed by section I is:

Is there anything else related to climate change impacts and adaptation that your country would like to communicate or report on?

Section I does not provide guidance in the same manner as sections A–H as it does not make any targeted requests for information. Instead however, it explicitly allows countries to include additional information relating to adaptation and climate impacts that is not presently outlined by the guidance.


Adaptation Committee and Least Developed Countries Expert Group (LEG). (2016). An input to the discussions by the Adaptation Committee and the Least Developed Countries Expert Group at their meetings on their work in addressing the mandates contained in decision 1/CP.21, paragraphs 41 and 45. Desk review by the secretariat. (Report no. AC-LEG/2016/2). [online] Available at: https://unfccc.int/files/adaptation/groups_committees/adaptation_committee/application/pdf/ac-leg2_mandates.pdf [Accessed 02 Nov. 2019].


UNFCCC. (2019b). Preparations for the implementation of the Paris Agreement and the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement. Decision 1/CP.24. 2–8 (Report no FCCC/CP/2018/10/Add.1) [online] Available at: https://unfccc.int/sites/default/files/resource/10a1.pdf [Accessed 28 Oct. 2019].


ANNEX I

Elements of an adaptation communication

An adaptation communication may include information on the following elements:

(a) National circumstances, institutional arrangements and legal frameworks;
(b) Impacts, risks and vulnerabilities, as appropriate;
(c) National adaptation priorities, strategies, policies, plans, goals and actions;
(d) Implementation and support needs of, and provisions to support, developing country Parties;
(e) Implementation of adaptation actions and plans, including:
   (i) Progress and results achieved;
   (ii) Adaptation efforts of developing countries for recognition
   (iii) Cooperation on enhancing adaptation at the national, regional, and international level, as appropriate;
   (iv) Barriers, challenges and gaps related to the implementation of adaptation;
   (v) Good practices, lessons learned and information-sharing;
   (vi) Monitoring and evaluation;
(f) Adaptation actions and/or economic diversification plans, including those that result in mitigation co-benefits;
(g) How adaptation actions contribute to international frameworks and/conventions;
(h) Gender-responsive adaptation action and traditional knowledge, knowledge of indigenous peoples and local knowledge systems related to adaptation, where appropriate;
(i) Any other information related to adaptation.

(as provided in decision 9/CMA.1)
**ANNEX II**

**Chapter I of the modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement**

### Elements of an adaptation communication

<table>
<thead>
<tr>
<th><strong>A. Purpose</strong></th>
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<tbody>
<tr>
<td>1. In accordance with Article 13, paragraph 5, of the Paris Agreement, the purpose of the framework for transparency of action is to provide a clear understanding of climate change action in the light of the objective of the Convention as set out in its Article 2, including clarity and tracking of progress towards achieving Parties’ individual nationally determined contributions (NDCs) under Article 4, and Parties’ adaptation actions under Article 7, including good practices, priorities, needs and gaps, to inform the global stocktake under Article 14.</td>
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<tr>
<td>2. In accordance with Article 13, paragraph 6, of the Paris Agreement, the purpose of the framework for transparency of support is to provide clarity on support provided and received by relevant individual Parties in the context of climate change actions under Articles 4, 7, 9, 10 and 11, and, to the extent possible, to provide a full overview of aggregate financial support provided, to inform the global stocktake under Article 14.</td>
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<tr>
<th><strong>B. Guiding principles</strong></th>
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<tr>
<td>3. The guiding principles of these modalities, procedures and guidelines (MPGs) are:</td>
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<td>(a) Building on and enhancing the transparency arrangements under the Convention, recognizing the special circumstances of the least developed countries (LDCs) and small island developing States (SIDS), and implementing the transparency framework in a facilitative, non-intrusive, non-punitive manner, respecting national sovereignty and avoiding placing undue burden on Parties;</td>
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<td>(b) The importance of facilitating improved reporting and transparency over time;</td>
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<td>(c) Providing flexibility to those developing country Parties that need it in the light of their capacities;</td>
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<tr>
<td>(d) Promoting transparency, accuracy, completeness, consistency and comparability;</td>
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<td>(e) Avoiding duplication of work and undue burden on Parties and the secretariat;</td>
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<td>(f) Ensuring that Parties maintain at least the frequency and quality of reporting in accordance with their respective obligations under the Convention;</td>
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<td>(g) Ensuring that double counting is avoided;</td>
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<td>(h) Ensuring environmental integrity.</td>
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<th><strong>C. Flexibility to those developing country Parties that need it in the light of their capacities</strong></th>
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<td>4. In accordance with Article 13, paragraph 2, of the Paris Agreement, the enhanced transparency framework shall provide flexibility in the implementation of the provisions of Article 13 to those developing country Parties that need it in the light of their capacities, and these MPGs shall reflect such flexibility.</td>
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<tr>
<td>5. These MPGs specify the flexibility that is available to those developing country Parties that need it in the light of their capacities pursuant to Article 13, paragraph 2, reflecting flexibility, including in the scope, frequency and level of detail of reporting, and in the scope of the review, as referred to decision 1/CP.21, paragraph 89.</td>
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<td>6. The application of a flexibility provided for in the provisions of these MPGs for those developing country Parties that need it in the light of their capacities is to be self-determined. The developing country Party shall clearly indicate the provision to which flexibility is applied, concisely clarify capacity constraints, noting that some constraints may be relevant to several provisions, and provide self-determined estimated time frames for improvements in relation to those capacity constraints. When a developing country Party applies flexibility provided for in these MPGs, the technical expert review teams shall not review the Party’s determination to apply such flexibility or whether the Party possesses the capacity to implement that specific provision without flexibility.</td>
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(as provided in decision 18/CMA.1)
### ANNEX II

**Chapter I of the modalities, procedures and guidelines for the transparency framework for action and support referred to in Article 13 of the Paris Agreement**

#### Elements of an adaptation communication

**D. Facilitating improved reporting and transparency over time**

1. **To facilitate continuous improvement, each Party should, to the extent possible, identify, regularly update and include as part of its biennial transparency report information on areas of improvement in relation to its reporting pursuant to chapters II, III, IV, V and VI of these MPGs, including, as applicable:**
   
   (a) Areas of improvement identified by the Party and the technical expert review team in relation to the Party's implementation of Article 13 of the Paris Agreement;
   
   (b) How the Party is addressing or intends to address areas of improvement as referred to in paragraph 7(a) above, as appropriate;
   
   (c) Those developing country Parties that need flexibility in the light of their capacities are encouraged to highlight the areas of improvement that are related to the flexibility provisions used;
   
   (d) Identification of reporting-related capacity-building support needs, including those referred to in paragraph 6 above, and any progress made, including those previously identified as part of the technical expert review referred to in chapter VII below.

8. **Parties' domestic plans and priorities with regard to improved reporting reported pursuant to paragraph 7 above are not subject to technical expert review, but the information may inform discussions on areas of improvement and identification of capacity-building needs between the technical expert review team and the Party concerned.**

9. **In accordance with Article 13, paragraphs 14 and 15, of the Paris Agreement, support shall be provided to developing country Parties for the implementation of Article 13 of the Paris Agreement and for the building of transparency-related capacity of developing country Parties on a continuous basis.**

#### E. Reporting format

10. **In the biennial transparency report:**
    
    (a) Each Party shall provide a national inventory report of anthropogenic emissions by sources and removals by sinks of greenhouse gases (GHGs), in accordance with the MPGs contained in chapter II below;
    
    (b) Each Party shall provide the information necessary to track progress in implementing and achieving its NDC under Article 4 of the Paris Agreement, in accordance with the MPGs contained in chapter III below;
    
    (c) Each Party should provide information on climate change impacts and adaptation under Article 7 of the Paris Agreement, in accordance with the MPGs contained in chapter IV below;
    
    (d) Developed country Parties shall provide information pursuant to Article 13, paragraph 9, in accordance with the MPGs contained in chapter V below. Other Parties that provide support should provide such information and, in doing so, are encouraged to use the MPGs contained in chapter V below;
    
    (e) Developing country Parties should provide information on financial, technology transfer and capacity-building support needed and received under Articles 9, 10 and 11 of the Paris Agreement, in accordance with the MPGs contained in chapter VI below.

11. **The LDCs and SIDS may submit the information referred to in paragraph 10 above at their discretion.**

12. **Notwithstanding paragraph 10 above, the national inventory report referred to in paragraph 10 above may be submitted as a stand-alone report or as a component of a biennial transparency report, it should clearly identify which part of the report is the adaptation communication.**

13. **When reporting information related to climate change impacts and adaptation under Article 7 of the Paris Agreement as referred to in paragraph 10(c) above, a Party may crossreference previously reported information and focus its reporting on updates to previously reported information.**

14. **Each Party shall transmit its biennial transparency report, and national inventory report if submitted as a stand-alone report, via an online portal maintained by the secretariat. The secretariat shall post the reports on the UNFCCC website.**

15. **Each Party shall submit the reports referred to in paragraphs 10 and 12 above in one of the official languages of the United Nations.**

(as provided in decision 18/CMA.1)
REPORTING ADAPTATION THROUGH THE BIENNIAL TRANSPARENCY REPORT:
A practical explanation of the guidance