CAPACITY TO MRV

ASSESSING CAPACITY AS A BASIS FOR DIFFERENTIATING THE

IMPLEMENTATION OF MRV REQUIREMENTS

DISCUSSION PAPER INSPIRED BY THE 2014 SUMMER SCHOOL OF THE INTERNATIONAL PARTNERSHIP ON MITIGATION AND MRV

GONÇALO CAVALHEIRO

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1 EXECUTIVE SUMMARY

Differentiation, together with commonality, is deeply rooted in the climate regime through the provisions of the Convention. Article 3.1 (Principles) states that *Parties should protect the climate system on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.*

Despite the changes in countries' responsibilities, capacities and social and economic contexts, the world is at least as diverse as it was in the early 1990's, meaning that now, as in the past, a 'one size fits all' (same type of commitment or same level of stringency of commitments) solution is neither fair nor equitable.

The concept of MRV was devised as a transparency measure in order to build trust among Parties. While the term may be politically charged, it should go without saying that all Parties support a transparent climate regime.

MRV requirements in the post-2020 regime would be the same for all Parties (as transparency for one Party is the same as transparency for another), but they would be differentiated by taking into account the commitment types and the capacity of each respective Party.

The question of how to differentiate is problematic. Being transparent about emissions or action depends not on the amount of emissions at stake, but rather on the capacity to actually be transparent.

This by no means implies that there should be different rules applicable to different Parties in the common framework: the rules need to be the same for all. It is also important to bear in mind the temporary nature of the differentiation as Parties progress towards equally high capacity.

Though few in number, methodologies do exist to assess and/or rank countries' capacity or at least rank countries based on their capacity. One such methodology has been developed for climate change mitigation purposes; others have been developed for broader development issues, such as:

- Human Development Indicators
- Institutional Indicators
 - o Worldwide Governance Indicators
 - The World Bank's Actionable Governance Indicators
 - o Governance Indicators Database
- Greenhouse Development Rights

Given that none of these methodologies can accurately capture each Party's specific national circumstances in relation to MRV capacity on climate policy and action, we do not propose that any of them be adopted for this purpose. However, they can serve as an

DIFFERENTIATING THE IMPLEMENTATION OF MRV requirements based on each party's capacity

inspiration and as a benchmark, in case Parties agree on such an approach in the Paris agreement.

2 INTRODUCTION

This paper was inspired by the International Mitigation and MRV Partnership 2014 Summer School that took place in the Dominican Republic, at which participants discussed an MRV framework in the post-2020 regime, applicable to all Parties, in which their respective capacities and capacity building needs would be fully taken into account.¹

The purpose of this paper is, consequently, to demonstrate that it should be possible to take into account each Party's specific capacity to MRV, in differentiating implementation of the MRV requirements in the post-2020 regime.

Several of the methodologies used by various institutions to assess countries' capacities in various domains – none of them directly related to MRV – are reviewed and described. However, it is not our intention to propose the adoption of any of the specific methodologies described or a combination of them.

The topic addressed – assessing MRV capacity in order to determine the stringency of the implementation of MRV requirements – is at a very early stage of discussion in the climate community. In this context, the paper does not address all the implications of such an approach (such as the required capacities, how flexibility can be operationalized and how to allocate a certain degree of flexibility to each Party). Neither do we make a specific negotiation / negotiable proposal.

The paper sets out to show, based on an assessment of each Party's capacity, that it should be possible to agree on an MRV framework applicable to all, which ensures transparency and factors Common But Differentiated Responsibilities (CBDR) Respective Capabilities (RC) and the social and economic context of Parties into its implementation.

In the following sections, a series of approaches, methods, data and information to assess countries' capacity in different areas are described. These can serve as an inspiration to set up an approach and methodology to specifically assess each Party's capacity to MRV emissions, as well as mitigation and adaptation actions and the support provided or received.

¹ http://mitigationpartnership.net/summer-school-2014-intended-nationally-determined-contributions-indcs

3 DIFFERENTIATION IN THE CLIMATE REGIME

Differentiation, together with commonality, is deeply rooted in the climate regime through the provisions of the Convention.

The preamble of the United Nations Framework Convention on Climate Change (UNFCCC) acknowledges that the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response, in accordance with their **common but differentiated responsibilities and respective capabilities and their social and economic conditions**.

Article 3.1 (Principles) states that *Parties should protect the climate system on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities.* Accordingly, developed countries should take the lead in combating climate change.

Article 4.1 (commitments) states that all Parties, taking into account their **common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances**, shall

- a) Develop, periodically update, publish and make available to the Conference of the Parties, in accordance with Article 12, national inventories of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, using comparable methodologies to be agreed upon by the Conference of the Parties
- b) Formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change

In light of the above, the principle of CBDR has been drafted with slightly different nuances in each of the three instances in which it appears in the UNFCCC:

- 1) In the preamble, in addition to CBDR, there is a reference to RC and to social and economic conditions;
- 2) In article 3.1, the reference to social and economic conditions is dropped; and finally,
- 3) Article 4.1 replaces the reference to RC with the more complex formulation of specific national and regional development priorities, objectives and circumstances.

This document will focus only on differentiation in respect of Measurement, Report and Verification (MRV) and thus will not discuss differentiation applied to mitigation.

In this context, it is also important to analyse article 12 of the Convention, related to 'Communication of information related to implementation'.

Article 12 paragraph 1, is applicable to all Parties without any differentiation:

In accordance with Article 4, paragraph 1, each Party shall communicate to the Conference of the Parties, through the secretariat, the following elements of information:

(a) A national inventory of anthropogenic emissions by sources and removals by sinks of all greenhouse gases not controlled by the Montreal Protocol, to the extent its capacities permit,

using comparable methodologies to be promoted and agreed upon by the Conference of the Parties;

(b) A general description of steps taken or envisaged by the Party to implement the Convention; and

(c) Any other information that the Party considers relevant to the achievement of the objective of the Convention and suitable for inclusion in its communication, including, if feasible, material relevant for calculations of global emission trends.

Article 12.2, however, includes specific provisions applicable to "each developed country Parties and each other party included in Annex I only". Article 12.5 specifically differentiates between Annex I and non-Annex Parties in relation to the date of submission of the 1st national communication. Within the latter, Least Developed Countries (LDCs) were subject to further differentiation.

The next chapter will discuss the merits of differentiation: why differentiate in the post-2020 regime? This will be followed by a brief discussion on what to differentiate (section 3) and finally, the core of this report, section 4 will focus on how to differentiate.

4 WHY DIFFERENTIATE?

As we have seen, differentiation (as is commonality) is deeply rooted in the climate regime. Some say that this is a reflection of early 1990's world that no longer exists, as it has changed both in terms of emissions and in terms of social and economic contexts (Pauw et al 2014; Depledge/Yamin 2009).

However, this does not necessarily mean that differentiation no longer makes sense. It may mean that the current differentiation and country classification need updating. The very word 'developing' conveys the notion of movement, of evolution. The social and economic context of some non-Annex I countries progressed significantly since the late 20th century, and these countries are progressively taking their place among the top big emitters.²

On the other hand, despite the changes in countries' responsibilities, capacities and social and economic contexts, the world is at least as diverse as it was in the early 90's, meaning that now, as before, a 'one size fits all' (same type of commitment or same level of stringency of commitments)³ solution is neither fair nor equitable (CAN 2013).

In light of this, this paper assumes that, in a future climate regime, in relation to MRV:

² http://www.wri.org/blog/2014/11/6-graphs-explain-world%E2%80%99s-top-10-emitters

³ While this statement could be applicable to any commitment under the UNFCCC, this paper deals only with MRV related commitments.

- No Party commitment should be less stringent in the post-2020 framework than is currently the case: there should be no backsliding.
- Some current non-Annex I Parties may be able to meet the most stringent MRV requirements in the post-2020 framework.
- The diversity of responsibilities, capacities and social and economic contexts within non-Annex I Parties should be taken into account through differentiation.

5 WHAT TO DIFFERENTIATE?

The concept of MRV was devised as a transparency measure in order to build trust among Parties. While the term may be politically charged, it should go without saying that all Parties support a transparent climate regime (Levin et al 2014). And in that regard, there should be no grey shades of transparency: a piece of information is, in accordance with agreed rules, either transparent or it is not.

With this in mind, Parties should be able to agree on a set of MRV requirements that ensure transparency of emissions and of action (including mitigation, adaptation and support) applicable to all Parties.

The applicability of MRV requirements to all Parties should not lead to an agreement on the least common denominator so that all Parties can fulfil such requirements. Parties should aim to agree on an optimal set of requirements that ensures full transparency.

A mechanism for differentiation based on the Parties' capacities would then ensure that the expected fulfilment of the requirements by each Party is aligned with its capacity to fulfil them at any given moment.

In short, **MRV requirements in the post-2020 regime would be the same for all Parties**⁴ (as transparency for one Party is the same as transparency for another). Nevertheless, **their respective stringency**⁵ **would be differentiated** (as a Party's capacity to fulfil the requirements may be different from another's). For example, all Parties are required to submit an annual GHG inventory. However, for an agreed period of time, until the capacity needs have been met and the capacity gaps bridged,⁶ those Parties with less capacity will be allowed to submit only every two years.⁷

⁴ Some specificities would, of course, need to be taken into account, e.g. as some countries provide and others receive support, while others may both provide and receive. The same applies to different mitigation commitments, where specific information to be reported may differ according to commitment type.

⁵ Understood as the expected standard of performance

⁶ This could be done in the scope of the verification process.

⁷ This is only an illustrative example of a way to operationalize flexibility. Further discussion on that topic, which is beyond the scope of this paper, is required.

This by no means implies that there should be different rules applicable to different Parties in the common framework: the rules need to be the same for all. Also it is important to bear in mind the temporary nature of the differentiation as Parties progress towards equally high capacity.

6 How to differentiate?

The question on how to differentiate is of course problematic, in particular because there does not seem to be a direct link between methods for differentiation applied to mitigation action and to MRV. While it may seem reasonable that total emissions (current and/or historic), emissions per capita, emissions per GDP, and other related indicators are used to differentiate among Parties in relation to (the ambition) of mitigation action, it does not seem to be the case for MRV differentiation.

The capacity to produce a GHG inventory is related only to GHG emissions – absolute, per capita or per GDP – insofar as such indicator is a proxy for the development stage of the country. Being transparent about emissions or action is not dependent on the number of emissions at stake, but rather on the capacity itself to actually be transparent.

This report therefore proposes that differentiation in relation to the stringency of the implementation of MRV requirements is based not only on each Party's commitment type but at the same on its capacity to actually fulfil such requirements. This paper focuses only on the second issue.

Though few in number, methodologies do exist to assess and/or rank countries' capacity or at least rank countries based on their capacity. One such methodology has been developed for climate change mitigation purposes; others have been developed for broader development issues, such as:

- Human Development Indicators
- Institutional Indicators
 - Worldwide Governance Indicators
 - \circ $\;$ The World Bank's Actionable Governance Indicators $\;$
 - Governance Indicators Database
- Greenhouse Development Rights

As mentioned before, the following description of methodologies to assess countries' capacities in different areas is not intended to propose the adoption of any of them or indeed a combination of them. Its sole purpose is to highlight that such an exercise is being done for many different purposes and that such an approach could be used in relation to climate MRV.

6.1 Human Development Index⁸

The Human Development Index (HDI) was created to emphasize that people and their capabilities should be the ultimate criterion for assessing the development of a country, rather than economic growth alone.

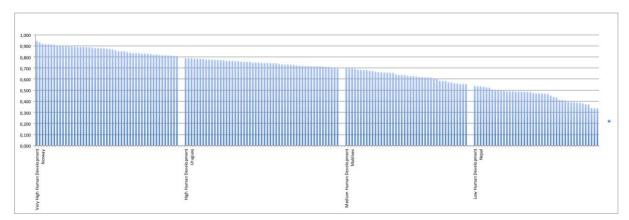
The HDI is a summary measure of average achievement in key dimensions of human development: a long and healthy life, knowledgeability and a decent standard of living. The HDI is the geometric mean of normalized indices for each of the three dimensions.

The health dimension component of the HDI – assessed by life expectancy at birth – is calculated using a minimum value of 20 years and maximum value of 85 years. The education component of the HDI is measured by the average years of schooling for adults aged 25 years and expected years of schooling for children of school entering age. The standard of living component is measured by gross national income per capita.

The figure below is an illustration of the countries ranked between 0.3 and 0.9 on the scale of 0 to 1 of human development.

Countries are classified as:

- Very High Human Development (from 0,8 above)
- High Human Development (from 0,7 to 0,8)
- Medium Human Development (from 0,55 to 7)



• Low Human Development (below 0,55)

Figure 1⁹ - Human Development Index¹⁰

Source: Adapted by the author¹¹

⁸ http://hdr.undp.org/en/content/human-development-index-hdi

⁹ Figures in this section are merely illustrative of the outcome of the application of the methodology and are not intended to show any specific country's position in the index or ranking.

¹⁰ There are about 50 countries in each of the 4 stages of development.

Assuming that the human development stage of a country bears a relationship to the strength of its institutions (Fukuda-Parr, et al 2011) and that the latter is related to its MRV capacity; and if the differentiation of countries in relation to the fulfilment of the MRV requirements were based on the HDI, the following flexibility could be considered for each stage of development:

- Very High and High Human Development no flexibility¹²
- Medium Human Development limited flexibility
- Low Human Development full flexibility (as per the flexibility currently attributed to LDCs and SIDS)

6.2 Institutional Indicators

Through the World Bank Institute, the World Bank has developed a series of indicators of governance and institutional quality which may be relevant in evaluating MRV capacity, namely the Worldwide Governance Indicators and the World Bank's Actionable Governance Indicators.¹³

6.2.1 Worldwide Governance Indicators (WGI)¹⁴

Governance consists of the traditions and institutions by which authority in a country is exercised. This includes the process by which governments are selected, monitored and replaced; the capacity of the government to effectively formulate and implement sound policies; and the respect shown by citizens and the state for the institutions that govern economic and social interactions among them.

The WGI includes aggregate and individual governance indicators for 215 economies over the period 1996–2013, for six dimensions of governance:

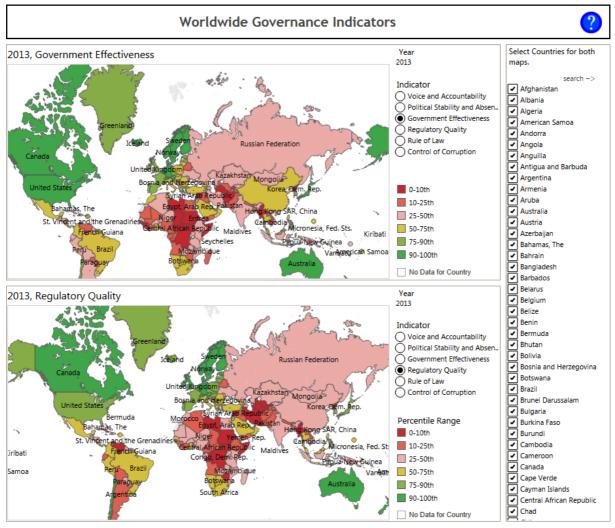
- Voice and Accountability
- Political Stability and Absence of Violence
- Government Effectiveness
- Regulatory Quality
- Rule of Law
- Control of Corruption

Of the above, perhaps the most relevant are *government effectiveness* and *regulatory quality*, for which the figure below shows each country's standing.

¹¹ Based on data downloaded at http://hdr.undp.org/en/data

¹² The discussion on how to operationalize flexibility falls outside the scope of this paper.

¹⁴ http://info.worldbank.org/governance/wgi/index.aspx#home



ann D., A. Kraay, and M. Mastruzzi (2010), The Worldwide Governance Indicators: Methodology and Analytical Issues

Source: Faulthanin 2., A Mary and M. mastur221 (2016). The Wondwide Government emicators: methodology and Anarytical Issues. The Wondwide Governance Indicators (WGI) are a research dataset summarizing the views on the quality of governance provided by a large number of enterprise, citizen and expert Note: The Wondwide Governance Indicators (WGI) are a research dataset summarizing the views on the quality of governance provided by a large number of enterprise, citizen and expert survey respondents in industrial and developing countries. These data are gathered from a number of survey institutes, think tanks, non-governmental organizations, international organiza-tions, and private sector firms. The WGI do not reflect the official views of the World Bank, its Executive Directors, or the countries they represent. The WGI are not used by the World Bank Group to allocate resources.

Figure 2 - World Governance Indicators for Government Effectiveness and Regulatory Quality

While there seems to be considerable consistency between the two indicators in each country, in some cases countries rank better in one indicator than in the other. In this case, a composite of both indicators could be useful. The average percentile range of each country would determine the level of flexibility attributable to the country:

- 50th to 100th percentile: no flexibility
- 25th to 50th percentile: limited flexibility
- below the 25th percentile: full flexibility (as per the flexibility currently attributed to LDCs and SIDS)

6.2.2 World Bank's Actionable Governance Indicators

Actionable governance indicators (AGIs) focus on specific and narrowly-defined aspects of governance, rather than broad dimensions. These indicators are clearly defined, providing information on the discrete elements of governance reforms. Because of this specificity, AGIs reflect actionability, i.e., they establish the link between actions and indicator values. In short, AGIs provide greater clarity regarding the action that governments can take to achieve better results in respect of assessments of certain areas of governance.

AGIs fall into three broad categories, depending on the type of data being gathered:

- Institutional arrangements (aka "rules of the game") are the formal and informal rules governing the actions of agents who are involved in the operation of a given governance system. These rules assign responsibilities and authority across the various actors and specify permitted, required and/or forbidden activities by those actors. They also establish procedures governing their activities and behaviour, creating (for better or for worse) incentives for them to perform their roles.
- Organizational capacity describes the resources employed by the relevant actors assigned responsibilities under the legal framework. Such indicators typically capture the magnitudes of particular resources (finance, personnel, equipment, facilities/buildings, etc.), and the quality of those resources (e.g., types of technology employed, qualifications of staff, etc.)
- Governance system performance refers to information on the practices of the agents assigned to particular implementation responsibilities. The variance in performance sheds light on whether practices are likely to advance the underlying objectives of a governance system.¹⁵

The AGI include several relevant indicators such as the Statistical Capacity Index,¹⁶ which reflects a country's capacity to produce statistics.

The figure below shows the capacity of most countries in the world (among others, most OECD countries are not included) to produce statistics in accordance with this methodology.

¹⁵ https://www.agidata.org/site/Explained.aspx

¹⁶ https://www.agidata.org/site/Map.aspx

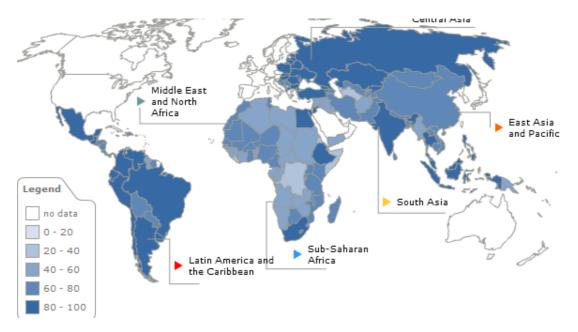


Figure 3 - AGI Statistical Capacity Index

Although this specific Index excludes several countries, it provides a very interesting indicator of a Party's MRV capacity (for the purpose of this report, it can be assumed that all OECD countries fall within the 80-100 interval). In that regard, flexibility could be attributed as follows:

- Countries falling in the interval 60-100: no flexibility
- Countries falling in the interval 40-60: limited flexibility
- Countries below 40: full flexibility (as per the flexibility currently attributed to LDCs and SIDS)

6.2.1 Governance Indicators Database – DataGov

The Governance Indicators Database is compiled by the Inter-American Development Bank (IDB), together with the African Development Bank, the UNDP and DFID in the UK. The indicators used in DataGov are drawn from about 30 different publications of a variety of institutions, including multilateral organizations, NGOs, private firms, and think tanks. None of these indicators is officially sanctioned by the IDB and it does not guarantee the accuracy or validity of such indicators.

DataGov provides a user-friendly interface for accessing most of the publicly available indicators related to governance. The interactive tool enables users to easily produce cross-national comparative and time series graphs and tables for immediate printing or for export to standard office software. It contains approximately 800 governance indicators for a global sample of countries whose coverage depends on the source. They can contribute to the assessment of governance performance, the identification of priority areas for reform and donor investment, and the analysis of the impact of country reform efforts. A key feature of the web tool is the information provided in respect indicator about the methodology used to

build it and the implications this has for the indicator's reliability, validity and suitability for making comparisons across countries and over time.¹⁷

The Chart below is for the 'Institutions' indicator, with the countries with stronger institutions on the left and on those with weaker institutions on the right.

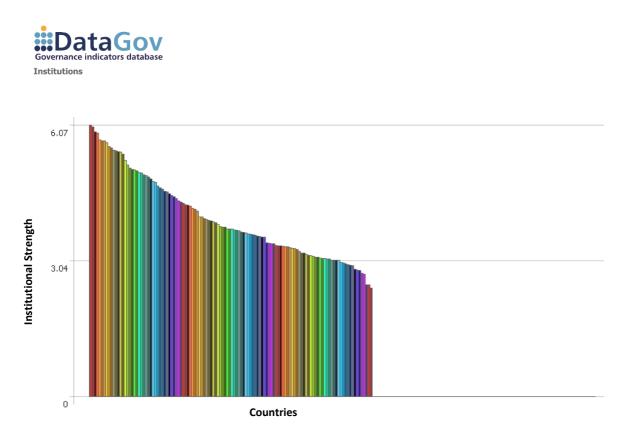


Figure 4 - DataGov's indicator in Institutions

If this indicator were used to apply flexibility in the application of MRV requirements, the following scale could be conceived (this proposal is arbitrary, even more so than the above):

- Above 5 points: no flexibility
- Between 4 and 5 points: limited flexibility
- Below 4 points: full flexibility (as per the flexibility currently attributed to LDCs and SIDS)

¹⁷ http://www.iadb.org/datagob/index.html

6.1 Greenhouse Gas Development Rights

The Greenhouse Development Rights (GDRs) framework is an Equity Reference Framework designed to support emergency global climate mobilization while, at the same time, preserving the rights of all people to reach a dignified level of sustainable human development free of the privations of poverty. Its basic approach, which is to calculate a Responsibility and Capacity Index for all countries and to apply that index within an effort-sharing framework, is the basis of the Climate Equity Reference Calculator and the Climate Equity Pledge Scorecard.¹⁸

The most relevant aspect of GDR is the proposal to assess capacity/capability, defined in income terms, whereby national capacity is calculated as the sum of all individual incomes, excluding income below the development threshold.

Capacity is measured in market exchange rate (MER) terms, while the development threshold is expressed in purchasing power parity (PPP) terms and then converted to country-specific values using the ratio of MER and PPP exchange rates appropriate to each country.

This capacity is combined with responsibility, to calculate a Responsibility and Capacity Index, which is taken as a measure of obligation to act.¹⁹

The fact that GDRs have been specifically developed for climate change purposes does not necessarily make it the most suitable solution for an application to differentiation on MRV. Its approach to assessing a country's capacity is linked merely to income per capita, which may be an indicator of institutional capacity, but is certainly insufficient when considered alone.

However, the concept of a threshold may be worth retaining in the development of a differentiation methodology applied to the implementation of MRV requirements.

7 CONCLUSION: THE WAY FORWARD

The methodologies, rankings and indicators described above can serve as a guide to assessing a Party's MRV capacity. However, it goes without saying that none of them can accurately capture each Party's specific national circumstances in relation to MRV capacity, climate policy and action. In that sense, none of them can be used *in isolation* for the purpose of assessing a Party's capacity MRV and thus attributing flexibility in the implementation of post-2020 MRV requirements.

The description of such methodologies can, however, serve as an inspiration and a benchmark for setting up an approach and methodology to specifically assess each Party's

¹⁸ http://gdrights.org/about/

¹⁹ http://gdrights.org/scorecard/glossary.php#gloss_dev_threshold

MRV capacity in respect of emissions, as well as mitigation and adaptation action, and support provided or received, in case Parties agree on such an approach in the Paris agreement.

The limited scope of this document does not allow us to address the following questions arising from the adoption of this approach:

- What are the required MRV capacities?
- How to assess capacity?
- How can flexibility be operationalized?
- How to allocate a certain level of flexibility to each Party?
- How to provide the required capacity building support?

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