

**Article 6.2 technical workshop**

**Options for implementing the infrastructure requirements as  
per chapter VI (Recording and tracking)  
of the annex to decision 2/CMA.3**

**Virtual event held on 18 and 19 May 2022**

**Informal report  
by the Chair of the Subsidiary Body for Scientific and  
Technical Advice**

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## I. Introduction

### A. Background and mandate

1. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) requested the secretariat to organize a technical workshop, ensuring broad participation of Parties, to develop options for implementing the infrastructure requirements, including guidance for registries, the international registry, the Article 6 database and the centralized accounting and reporting platform referred to in chapter VI of the annex to decision 2/CMA.3 (Recording and tracking), for consideration by the Subsidiary Body for Scientific and Technological Advice (SBSTA) at its fifty-sixth session (SBSTA 56, June 2022).<sup>1</sup>
2. The SBSTA Chair, Mr. Tosi Mpanu Mpanu (Democratic Republic of the Congo), at his own discretion, invited Mr. Peer Stiansen (Norway) and Ms. Moekti Handajani Soejachmoen (Indonesia) to co-facilitate the technical workshop. This arrangement does not pre-empt any facilitation arrangements for SBSTA 56.
3. In addition to this technical workshop, the CMA invited submissions from Parties on options for implementing the infrastructure requirements referred to in chapter VI of the annex to decision 2/CMA.3 (Recording and tracking) by 31 March 2022.<sup>2,3</sup>
4. During the opening of the workshop, the SBSTA Chair confirmed the importance of the submissions and the output from the workshop as significant inputs to the negotiations, irrespective of whether the submission was received by the deadline. However, the SBSTA Chair indicated that the earlier the submissions were made, the greater the opportunities would be for Parties to appreciate and consider their content.
5. As has been the tradition in relation to agenda items on Article 6 of the Paris Agreement, the technical workshop was open to admitted observers to follow the proceedings of the workshop via live broadcast. Regarding submissions made by observers, the SBSTA Chair clarified that such submissions were accepted and published as unsolicited submissions on the submissions' portal for information of Parties but were not part of the formal process.

### B. Informal report

6. The SBSTA Chair, with the assistance of the co-facilitators and the secretariat, has issued this informal report under his own authority. This report is informal in nature, has no status, and does not represent agreed views, ideas, or text; nor is it an attempt to draw any conclusions on possible areas of convergence or divergence. It does not attempt to provide a record of all views expressed during the technical workshop or indicate the weight of support that each of the options appeared to have.

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<sup>1</sup> See decision 2/CMA.3, paragraph 9.

<sup>2</sup> Find the submissions here: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement/cooperative-implementation/submissions-guidance-on-cooperative-approaches-referred-to-in-article-6-paragraph-2-of-the-paris#eq-2>

<sup>3</sup> See decision 2/CMA.3, paragraph 8.

7. This report does not attempt to synthesize the information from the submissions. However, where Parties discussed information from their submissions in the workshop, reference to such options is made.

## II. Proceedings

8. The technical workshop was held on 18 and 19 May 2022, from 13:00 to 16:00 CEST in a virtual format. The following two topics were discussed:
  - (a) Day one: Registries and the international registry;
  - (b) Day two: Centralized accounting and reporting platform and Article 6 database.
9. Prior to the workshop, groups and Parties were invited to prepare a presentation for delivery at the technical workshop. Slide decks shared by presenters are available on the technical workshop page.<sup>4</sup> The following groups and Parties delivered presentations:
  - (a) Day one: European Union, Japan, Singapore, and United States of America;
  - (b) Day two: European Union and Japan.
10. In opening the workshop, the SBSTA Chair outlined the procedural background to the workshop. Furthermore, the SBSTA Chair asked the participants to share new ideas and proposals that would find broad support and move the work of the SBSTA forward, particularly given the limited time available.
11. To steer the discussions, the SBSTA Chair provided guiding questions, while also inviting Parties to bring any other issues into the discussions that they considered relevant. The guiding questions were included in the agenda for the technical workshop.<sup>5</sup>
12. The SBSTA Chair was not available to close the workshop. Instead, the co-facilitators thanked the participants for joining at inconvenient times and for contributing to the open exchange of views. The co-facilitators also reiterated that the discussions of the workshop would be captured in the form of an informal report, which would be published one week before the SBSTA meeting in June 2022.
13. The technical workshop was attended by 83 participants and a further 120 observes via broadcast.

## III. Summary of discussions

14. This chapter provides summaries of the presentations and the ensuing discussions resulting from an informal exchange of views among the workshop participants. Views and options are grouped into general and special considerations for each topic, whereby the

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<sup>4</sup> Slide-decks for the presentations delivered at the workshop are available at: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement/cooperative-implementation/technical-workshops-related-to-the-article-62-of-the-paris-agreement#eq-2>. Some presenters did not share slide-decks for publishing.

<sup>5</sup> Find the agenda here: [https://unfccc.int/sites/default/files/resource/Agenda\\_Registries\\_published\\_13\\_May\\_0.pdf](https://unfccc.int/sites/default/files/resource/Agenda_Registries_published_13_May_0.pdf)

former group is of a cross-cutting nature. Possible options and alternative views are outlined, noting that not all are mutually exclusive.

## **A. Registries and the international registry**

15. This section captures the options discussed by workshop participants during the workshop session held on 18 May 2022, on the registries and the international registry as referred to in section VI.A of the annex to decision 2/CMA.3. Views expressed enhancing the understanding of options or highlighting other relevant considerations are also reflected.
16. In response to the guiding questions,<sup>6</sup> some participants addressed matters related to the mechanism registry, noting that the Article 6.4 mechanism registry will be discussed under a separate agenda item during the SBSTA session.
17. The possible registry models, as outlined by participants, are included in the sub-section on special considerations to ease the relating of each registry type to these models.

### **1. General considerations**

18. Participants outlined general considerations relevant to the Article 6.2 registries and the international registry:
  - (a) Principles;
  - (b) Terminology and nomenclature;
  - (c) Unique identifiers;
  - (d) Registry specifications;
  - (e) Designated governmental/national authority;
  - (f) Capacity-building;
  - (g) Other considerations.

#### **(a) Principles**

19. Regarding principles relevant to registries, participants outlined the following principles and groups of principles:
  - (a) *Accounting principles*: transparency, accuracy, completeness, comparability and consistency; support traceability through proper tracking and reporting, so that double-counting is avoided;
  - (b) *Interest of stakeholders*: accounting; trading; review; maximizing participation;
  - (c) *Design principles*: robust; transparent; accessible; secure, including preventing unauthorized access; efficient; cost-effective; self-financing;
  - (d) Functionality in response to needs and outcomes;

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<sup>6</sup> For the guiding questions see the agenda here:  
[https://unfccc.int/sites/default/files/resource/Agenda\\_Registries\\_published\\_13\\_May\\_0.pdf](https://unfccc.int/sites/default/files/resource/Agenda_Registries_published_13_May_0.pdf)

- (e) Flexibility by avoiding prescriptive approaches;
- (f) Continuous improvement;
- (g) Additional safeguards to enhance transparency by maintaining metadata layer to track issuance and transactions of internationally transferred mitigation outcomes (ITMOs);<sup>7</sup>

**(b) Terminology and nomenclature**

20. Regarding terminology and nomenclature, it was noted that it would be helpful to clarify terms used in relation to infrastructure. Terms may be clarified as part of the specifications (general design requirements) for registries – for example, unit, serialization, unique identifiers, transactions with ITMOs, account types in a registry – as relevant and as applicable.
21. It was highlighted that “cancellation of ITMOs” may imply a permanent set aside (no use) of ITMOs in a registry implemented as an accounting ledger.

**(c) Unique identifiers<sup>8</sup>**

22. The purpose of the registry and the information provided through it contributes to building mutual trust and confidence in the environmental integrity of what is traded and how it is accounted. To enable this requires certain information to be traced back from an aggregate number in nationally determined contribution (NDC) accounting through ITMOs, to the mitigation activities that delivered the reductions.
23. Regarding unique identifiers, a registry records ITMOs through unique identifiers, as applicable, and all transactions with ITMOs. Unique identifiers may relate to other objects, such as transactions, accounts and database entries. It would be necessary to clarify the process for assigning identifiers (e.g. which system, at what step).
24. Unique identifiers for ITMOs may identify:
- (a) ITMOs as aggregated **accounting amounts** reported by Parties for NDC tracking;
  - (b) ITMOs as **units** issued and transferred in blocks.<sup>9</sup>
25. Several proposals for serialization of ITMOs were made, including on labelling of units for specific parameters such as authorized uses.<sup>10</sup>

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<sup>7</sup> Climate Warehouse project of the World Bank was provided as an example. More information is included in the slide deck by Singapore.

<sup>8</sup> See also chapter III.B.1. (Unique identifiers) of the informal report by the SBSTA Chair on Tables and outlines for reporting information required pursuant to chapter IV (Reporting) of the annex to decision 2/CMA.3 available here: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement/cooperative-implementation/technical-workshops-related-to-the-article-62-of-the-paris-agreement#eq-1>

<sup>9</sup> It may be noted that a block of units is essentially an amount of units.

<sup>10</sup> See examples in the slide deck by Japan on this topic and in the submission by France on behalf of the European Union and its Member States on Article 6 Infrastructure for recording and tracking.

26. Irrespective of the form that the ITMOs take (a unit or an amount), the following approaches to unique identification of ITMOs were discussed:

- (a) A harmonized or universal approach to unique identifiers for ITMOs;
- (b) Unique identifiers for ITMOs within a cooperative approach.

**(d) Registry specifications**

27. Technical specifications need to be developed for each registry type, namely the registries of participating Parties, the international registry, and the Article 6.4 mechanism registry, for adoption by the CMA. The technical specifications may encompass, as relevant and as applicable, any or all of the following:

- (a) The form of a registry:
  - (i) A standardized electronic database, being able to open and close accounts, issue and hold units and record, including through unique identifiers, authorization and changes in status of units;<sup>11</sup>
  - (ii) Developing countries could use simple Excel-based tracking of the information in paragraph 29.<sup>12</sup>
- (b) Unique identifiers and what is being uniquely identified (e.g. ITMOs, transactions, entries);
- (c) Account types;
- (d) Authorization, issuance, and changes in status of ITMOs, which a registry does not necessarily record in real time;
- (e) Procedure for transfers and completion of transactions, especially those that give rise to corresponding adjustments, based on:
  - (i) Direct linking of registries through common minimum standards to enable intercommunication between registries and the Article 6 database and the centralized accounting and reporting platform (CARP);
  - (ii) Cancellation in the transferring registry and re-issuance in the receiving registry, tracking the original identifier and with appropriate reconciliation procedure;
- (f) Publicly accessible information;
- (g) Security.

28. Participants also highlighted that:

- (a) Authorization is a special case and leaves uncertainty about the timing of authorization (prior to activity, prior to the first transfer, or ITMO transactions

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<sup>11</sup> Changes in status of units on the basis of authorizations, first transfer, transfer, acquisition, use towards NDCs, authorization for use towards other international mitigation purposes, and voluntary cancellation (including for overall mitigation in global emissions).

<sup>12</sup> Paragraph 29 of the annex to decision 2/CMA.3.

happen before authorization) and its level (for all the activities under the same cooperative approach, for each activity, or for each ITMO). Guidance is desirable on the options available to Parties in terms of authorization and identification of triggers for adjustment and how to reflect them in the registries. It was highlighted that:

- (i) The first transfer is a reporting requirement and may be communicated as part of the information on the Party's method for applying corresponding adjustments in the initial report;
- (b) The registries could be a tool to ensure that reversals are addressed in full, from the stage of detection to stage of accounting adjustments;
- (c) Existing programmes can align their registries according to common specifications or optimal arrangements.

**(e) Designated governmental/national authority**

- 29. It was suggested that each participating Party designate a national authority as registry manager to maintain its registry and develop and make publicly available rules and guidelines necessary for operating the registry.
- 30. The designated governmental/national authority should have the flexibility to outsource the operational functions of the registry to a non-governmental entity, in a way that is overseen by the governmental authority.

**(f) Capacity-building**

- 31. It may be difficult (for a Party) to reconcile all the different pieces of information and to make choices regarding registries. Therefore, there is a need for capacity-building through:
  - (a) Agencies and institutions that provide capacity-building support;
  - (b) The provision of the international registry.
- 32. Least developed countries (LDCs) have limited experience with managing carbon registries, including at the governmental level, and therefore capacity-building will be required for LDCs to make the choices regarding registries and to implement them.
- 33. Capacity-building work is extremely urgent, since having and operating a registry is a participation requirement under Article 6.2 and LDCs cannot be left behind in relation to other participants of Article 6 instruments.

**(g) Other considerations**

- 34. Participants highlighted several other considerations:
  - (a) The demand for the system will have bearing on the design of systems and registries, in particular. The secretariat should develop a plan for implementation to enable oversight by Parties. Parties may be surveyed on their needs and intentions;



- (b) It is desirable to solicit opinions and suggestions from Parties and relevant stakeholders during the system development process, including through demonstrations by the secretariat and invitations to Parties to conduct system testing, in order to optimize system design;
- (c) A registry system administrators meeting may be established as a place to share and discuss common issues (e.g. security issues);
- (d) The secretariat has a certain discretion in implementing the systems at the international level.

## **2. Special considerations**

35. Participants considered the following issues:

- (a) Models for registries;
- (b) Registries;
- (c) International registry and its:
  - (i) Governance;
  - (ii) Funding model;
  - (iii) Service levels;
- (d) Article 6.4 mechanism registry.

### **(a) Models for registries**

36. Registries can refer to a range of platforms and functionalities, e.g. from publishing information that can be queried to facilitating instrument issuance, title transfer, among others. Participants outlined three broad models for ITMO registries, with variants:

- (a) Model 1. A nationally designated registry that issues and tracks ITMOs as units;
- (b) Model 2. Nationally designated registries that track [aggregated] ITMO amounts;
- (c) Model 3. Centralized registries, consisting of the international registry integrated with the Article 6.4 registry, that issue and track ITMOs as units;

37. Regarding the choice of model, Parties:

- (a) May choose a model; or
- (b) Do not have to choose between models, noting that each Party may develop capabilities additional to those agreed as the minimum guidance/requirements for registries.

38. Model 1 may have the following variants:

- (a) Model 1.a. The nationally designated registry issues and tracks all ITMOs from all cooperative approaches in which the Party participates;

- (b) Model 1.b. The nationally designated registry can acquire, as applicable, ITMOs from the registries that generated the units.
39. Furthermore, in relation to Model 1, the following was highlighted:
- (a) Model 1 consists of fewer pieces and a simpler chain of custody but gives rise to systemic risks and may require more legislative capacity but also elaborate security and property provisions. Not all Parties may have the necessary capacities;
- (b) Acquiring Parties have full control over these units (assets);
- (c) Nationally designated registries may be connected. However, it would be necessary to clarify if such registries may connect to the centralized registries (the international registry and the Article 6.4 mechanism registry), forming a fully integrated system of electronic databases.
40. According to Model 2, national registries (or Parties' tracking systems)<sup>13</sup> do not issue and hold asset but track [aggregated] ITMO amounts representing the underlying assets tracked on a per-tonne basis in the registries of the programmes and mechanisms<sup>14</sup> underpinning all cooperative approaches in which the Party participates, similar to an accounting ledger or a data collection system.
41. Under Model 2, the actual trading instruments or assets never leave their original registry, which needs to adhere to adequate security and legal standards. A Party cannot further transfer ITMOs without a transfer of the real assets in the underlying registry. Furthermore, the following was highlighted:
- (a) It would require an agreed process for reconciliation between registries to ensure that the same unit was not in more than one registry, including through the Article 6 database that fulfils the reconciliation process;
- (b) The Party is only responsible for reporting its assets and liabilities, not for the actual management of these assets and liabilities;
- (c) The model is associated with the risk of duplication and double-counting. Due to information being tracked in two registries, provisions should be made to ensure that such duplication of information is not considered to be double-counting;
- (d) It would be necessary to clarify if ITMOs are labelled on the national level or just in the underlying registries.
42. As per Model 3, centralized registries may be used by participating Parties. This model entails the use of the international registry by all Parties. The Article 6.4 mechanism registry could be embedded in the international registry. The two international registries are integrated with the CARP and the Article 6 database, forming a fully integrated system, reducing costs.

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<sup>13</sup> Examples of such tracking systems include the World Bank's Climate Warehouse and the HIS Markit meta-registry.

<sup>14</sup> For example, the Joint Crediting Mechanism registry, EU Emissions Trading Scheme registry, Article 6.4 registry.

**(b) Registries**

43. Guidance for national registries should focus on transparency and not linkages (of registries). National registries provide transparency in national tracking of authorizations, first-transfer, among others, and linkages, not on the underlying tradable instruments. Guidance may be elaborated on the elements and best practice pertaining to the transparency and data integrity of registries that underpin cooperative approaches (programme registries).
44. Parties can develop additional functionalities (for their national registries) that are more complex, including for interlinks, but not as a requirement for all. Such registries can have their own public interface for providing information on authorization, links to authorized programmes or activities, clarifications about how authorization tracking is managed in the country, among other information. These are examples of the transparency that these systems will deliver to the public so that private entities can understand what is authorized and what is being accounted by the Parties.
45. Further aspects with respect to the functions of registries were highlighted:
- (a) With respect to links to the CARP and the Article 6 database:
    - (i) There is no indication of direct interlinkages between registries and the CARP and the Article 6 database;
    - (ii) A link would ease the exporting of data from registries into the tables for annual Information and into the Article 6 database and, where appropriate, the CARP;
  - (b) Depending on the preferred model for registries (see (a) above “Models for registries”), nationally designated registries can have accounts for private entries;
  - (c) Parties can designate a registry manager;
  - (d) A national registry may not be limited to Article 6 but can be extended to functions such as monitoring, reporting and verification of activities, handling information related to NDC, among other functions.

**(c) International registry**

46. Parties would have to develop modalities and procedures for the international registry. The international registry:
- (a) Has the same functions as nationally designated registries and should not exceed their functions;
  - (b) Could illustrate best practice for national tracking systems and produce common tabular format reports;
  - (c) Tracks quantitative information on ITMOs for overall mitigation in global emissions and quantitative information on voluntary cancellation for contributions for adaptation.
47. Depending on the preferred model for registries (see (a) above “Models for registries”), the international registry would hold units, or be in the form of a ledger tracking amounts

for the original assets in programme/cooperative approach registries. It is connected to the Article 6.4 mechanism registry, but it tracks only authorized ITMOs. The connection may signify/enable (according to the preferred model for registries):

- (a) The transfer A6.4ERs<sup>15</sup> from the Article 6.4 mechanism registry to the international registry; or
- (b) The recording of accounting information on ITMOs in the international registry based on the transactions with units in the Article 6.4 mechanism registry to minimize reporting burden. It could give Parties the option of compiling authorizations, and populating and formatting aggregated entries on, first-transfers, use, among others for annual information (agreed electronic format (AEF) submission), noting that the international registry is not integrated with the CARP (it is a part of the CARP).

48. Regarding the **governance** of the international registry, it was noted that:

- (a) It is governed by the CMA;
- (b) It is administered, rather than governed, as the international registry is an accounting ledger without the underlying rule set for instrument creation that would require ongoing governance;
- (c) Parties can designate a national administrator, supported by the secretariat.

49. Regarding the **funding model** of the international registry, it was noted that it can be funded by:

- (a) Fees to adhere to the self-funding principle (particularly if it holds actual assets);
- (b) Contributions from all international transactions;
- (c) Allocations from the CDM funds;
- (d) Developed countries;
- (e) Supplementary funding, which is already specified in the CMA decision and is sufficient for an international registry that is implemented as an accounting ledger.

50. Regarding the **service levels** (in relation to (a) above “Models for registries” and corresponding type and demand for services), the international registry may support:

- (a) Party accounts; or
- (b) Party and entity accounts, the latter under the participating Party which maintains oversight.

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<sup>15</sup> Article 6.4 emission reductions in accordance with decision 3/CMA.3.

**(d) Article 6.4 mechanism registry**

51. As stated earlier, participants noted that the Article 6.4 mechanism registry will be discussed under a separate agenda item during the SBSTA session. However, in response to guiding questions, several options for implementing this registry were identified.
52. Based on (a) above “Models for registries” the Article 6.4 mechanism registry could be:
- (a) Fully integrated or embedded in the international registry, noting that the international registry may only track authorized units, while the Article 6.4 mechanism registry can also track non-authorized units, with the corresponding labels, including where it tracks certified emission reductions as pre-2021 units;
  - (b) Connected to the international registry to provide an opportunity for efficiency and streamlining for Parties engaging with the Article 6.4 mechanism.

**B. Centralized accounting and reporting platform and Article 6 database**

53. This section captures the options discussed by workshop participants during day two (19 May 2022), on the centralized accounting and reporting platform and the Article 6 database as referred to in sections VI.B and VI.C of the annex to decision 2/CMA.3.
54. The section is divided into general considerations and special considerations.

**1. General considerations**

55. Participants outlined general considerations relevant to the two systems:
- (a) Principles;
  - (b) Integration options;
  - (c) Shared functions;
  - (d) Capacity-building;
  - (e) Other considerations.

**(a) Principles**

56. The principles identified in section A above, on the registries and the international registry, apply to this section with few exceptions. In addition, participants identified the following principles:
- (a) Keeping in sight the overall framework of transparency and maximizing integration to avoid duplication of work;
  - (b) User-friendliness, including:
    - (i) Being interrogable;
    - (ii) Re-using submitted information to simplify subsequent reporting;
  - (c) Restricted interpretation of confidentiality;

- (d) Protecting confidential information.

**(b) Integration options**

57. Options for integration of the two integrated systems with other systems were outlined as follows:

- (a) The CARP and the Article 6 database have a connection with the registries and the international registry:
  - (i) Such connection (exchange of data) should be optional;
- (b) The CARP and the Article 6 database are integrated with the international registry and the Article 6.4 mechanism registry;
- (c) The CARP and the Article 6 database receive information directly from the international registry and provide interface for national registries and the Article 6.4 mechanism registry;
- (d) The international registry is only part of, but not integrated with, the CARP, possibly as an equivalence with registries of participating Parties;
- (e) The CARP and the Article 6 database have an interface/coordination with the reporting tools for Article 13 of the Paris Agreement<sup>16</sup> to reduce reporting burden (no two interfaces for the same information).

**(c) Shared functions**

58. Participants identified the following options for shared functionalities:

- (a) Submission of information to be enabled through:
  - (i) Electronic means for uploading information, including directly from the registries; and
  - (ii) An interface/portal to be filled by a designated person with access to transfer all the information from the different reports, including through the use of standardized templates;
- (b) Search functions, queries and downloading of information, including for the public:
  - (i) A Party can download information it has already submitted so that the information does not need to be compiled;
- (c) Possibility to retrieve information from already submitted reports to only update this information, as a means to alleviate the reporting burden. Furthermore, the option for automated exporting/importing of information across reports should be explored by the secretariat. This would allow Parties to input much of the information only once and edit and update it (rather than re-upload it), as necessary;
- (d) Automated checks and flagging of potential inconsistencies;
- (e) Generation of reports for the review teams.

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<sup>16</sup> Article 13 of the Paris Agreement on the enhanced transparency framework.

**(d) Capacity-building**

59. For LDCs, it would be important to count on the double-checking support from the secretariat in the learning phase.

**(e) Other considerations**

60. Considering the objectives of the two systems, participants discussed various expectations in relation to the review process:

- (a) The review process and how it will be organized, including in relation to engaging with the review under Article 13 of the Paris Agreement, should be input to the systems' design;
- (b) The review teams should have access to Party reports either through links or direct access;
- (c) Consistency check, communication on inconsistencies, and correction processes (how participating Parties correct submitted information), including how checks are organized and completed for participating Parties, need to be elaborated, possibly as part of the review process;

61. Participants reiterated the following considerations as relevant to the CARP and the Article 6 database:

- (a) It is desirable to solicit opinions and suggestions from Parties and relevant stakeholders during the systems development process, including through demonstrations by the secretariat and invitation to Parties to conduct system testing, to optimize system design;
- (a) The secretariat has a certain discretion in implementing the systems at the international level.

**2. Special considerations**

62. Participants considerate the following issues:

- (a) Functions and design of the Article 6 database;
- (b) Functions and design of the CARP.

**(a) Functions and design of the Article 6 database**

63. The Article 6 database is part of the integrated systems to meet the demands of the public, the review process, the secretariat and Parties. With regard to its design:

- (a) The database sits behind the platform to bring together (store) all information, including emissions-related data;
- (b) The database model should be based on all information that needs to be captured;
- (c) It should be in the form of:
  - (i) A multi-layered relational database;

- (ii) A shared ledger where entries are populated by Party submissions and double-counting is avoided, where entry identifiers and transaction identifiers are assigned, and where the information is standardized without unitizing (ITMOs) or having to link to national registries;
    - (iii) A set-up allowing tracking of ITMOs at any time based on automatic checks of their unique identification to guarantee the transparency and confidence between Parties, as well to inform stakeholders;
  - (d) Its reporting interface should be based on the requirements for annual information.
64. The Article 6 database may provide the following capabilities:
- (a) Performing the consistency check:
    - (i) For which unique identifiers may be useful;
    - (ii) For ITMO amounts, where:
      - a. Amounts acquired by Parties should match amounts first-transferred /transferred;
      - b. Amounts used by Parties should not exceed amounts first-transferred;
  - (b) Search functions for inconsistencies;
  - (c) Corrective formulae for some of the calculations;
  - (d) Automatic aggregation of information by cooperative approach or by vintage based on the disaggregated information in the AEF submitted by Parties;
  - (e) Subsequent reporting that relies on position in the database, i.e. Parties refer to a position in the database in a subsequent report instead of repeating the same report.

**(b) Functions and design of the centralized accounting and reporting platform**

65. With regard to the CARP, participants identified options for implementation, including:
- (a) Storing information (which is directly provided);
  - (b) Maintaining links to where required information is available;
  - (c) Supporting the comparability of information;
  - (d) Supporting cross-referencing;
  - (e) Supporting the provision/forwarding of information relevant to Party cooperative approaches to the A6 technical expert review (TER) team via a link to the information in the database or a link to the report on the consistency check by the secretariat;
  - (f) Providing statistical functions;
  - (g) Publicly displaying:



- (i) Information stored in the Article 6 database;
- (ii) Information important for transparency;
- (iii) Non-confidential information, including from consistency checks;
- (iv) Article 6 TER reports;
- (v) The accounting part of the information provided, including authorization from AEF, ITMOs, emissions and emissions balances, and annual corresponding adjustments;
- (vi) Granular information, as decided by the reporting participating Party.

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