UNFCCC ART. 6.2 SUBMISSION

Options for the outlines for the information required pursuant to chapter IV of the annex (Reporting) and for implementing the infrastructure requirements referred to in chapter VI of the annex (Recording and tracking)

About IETA

The International Emissions Trading Association (IETA) is a Switzerland-registered not-for-profit entity dedicated to the objectives of the United Nations Framework Convention on Climate Change. It was created in June 1999 to establish a functional international framework for trading in greenhouse gas emission reductions. Today, IETA is the leading voice of the business community on the subject of carbon markets. IETA promotes an emissions trading regime that results in real and verifiable greenhouse gas emission reductions, while balancing economic efficiency with environmental integrity; the establishment of effective market-based trading systems for greenhouse gas emissions by businesses that are demonstrably fair, open, efficient, accountable and consistent across national boundaries; and advocates for maintaining societal equity and environmental integrity while establishing these systems. Since its creation, IETA has remained committed to its vision of a global greenhouse gas market. IETA's 200+ member companies include some of the world's leading corporations in the energy, utility, cement, aluminium, chemical, paper, agri-food, transport and technology sectors; as well as leading firms in the data verification and certification, brokering and trading, legal, finance, and consulting industries.

Introduction

IETA welcomes the opportunity to submit its views on options for reporting outlines and for implementing the recording and tracking infrastructure required for the operationalisation of cooperation mechanisms under Article 6.2 of the Paris Agreement. The implementation of these technical requirements is fundamental to the delivery of effective cooperative approaches that promote higher ambition, sustainable development and environmental integrity. As carbon markets expand and grow in value, mobilising private capital to commit to projects and transactions will require sufficient assurances that assets will be safeguarded, and the integrity of the system will be protected.

A sound outcome should find a balance between the bottom-up and decentralised architecture of the Paris Agreement with the need for the UNFCCC Secretariat to receive information from Parties in a streamlined and standardised format to avoid double counting and to enable checks for inconsistencies.

In our view, the provisions in chapter IV and chapter VI of the 6.2 guidelines should be interpreted as minimum requirements. When developing the reporting outlines and the infrastructure, the interests of both Parties and carbon market participants should be taken into account. While the guidelines foresee these mechanisms as primarily accounting and informational tools, they can also support market formation and public confidence. Similarly, the reporting and infrastructure requirements should accommodate the integration of information from both the 6.4 mechanism and registries run by independent standards (such as those used by CORSIA and the voluntary carbon market). We therefore support the Secretariat in seeking and considering views from a broad set of Party and non-Party stakeholders in future planning and development steps as the independent registry systems evolve to assist in meeting the Paris Agreement goals.

IETA believes that the deployment of new technologies, such as inventory management software and distributed ledger technologies (DLT) including sustainable and secure public blockchain, can strengthen trust and data integrity to reduce the reporting burden for Parties and enhance the quality of the information reported. This can also improve the efficiency of the Secretariat's efforts to collate, synthesize and analyse the data for publication. Private sector expertise and funding can be leveraged to provide this infrastructure at a low- or no-cost for Parties and end-users.

The guiding principles should be:

- Standardisation
- Interoperability
- Security of information

Timing of publications – Carbon market participants benefit from frequent publication

While Parties have considered annual and biennial reporting as sufficient for tracking of national progress, such reporting frequency falls short of what carbon market participants would like.

To stimulate greater climate action, the market would benefit from more frequent publication of information on ITMOs authorised, transferred, used and cancelled. This would help provide better transparency to market participants and observers alike. This transparency would encourage the development of effective cooperative approaches that mobilise investment in emission reductions and removals where it is most needed. Interoperability and direct connection to the UNFCCC databases would help ensure the provision of the complete, real-time data information the market needs.

Report submission – Full standardisation and integration of infrastructure is conducive to high-quality reports

While the 6.2 guidelines are clear as to what Parties need to report to the Secretariat and when, very little is said about how these reports should be submitted. In our view, the tables and outlines for the initial report and the annual information should be fully standardised and double reporting should be avoided.

Reports submitted by Parties should feed directly into the Article 6 database and the Centralised Accounting and Reporting Platform (CARP). This will ensure the immutability of the data and that changes are fully recorded. It will also minimise the resources spent by the Secretariat on data manipulation.

Data sharing between registries and reporting initiatives – The use of technology enables real-time publication of transfers and authorisations

We believe that the Secretariat should pursue a reporting model that enables an immediate reflection of transfers as provisional entries in the Article 6 database and the CARP once these transfers take place between national registries. Authorisations could also be published in real-time, taking into consideration pre-approvals in national frameworks.

To facilitate this real-time, comprehensive reflection of activity, IETA believes that credible national registries, registries run by independent standards and the international registry should be synchronised to the Article 6 database. This is a win-win solution as it reduces the reporting burden for Parties complying with their annual and biennial obligations and provides information to market participants. It would strengthen integrity without replicating functions. Technical solutions to achieve this may leverage application programming interfaces (APIs) to transmit project metadata from registries as they are updated to the UN infrastructure.

The UNFCCC should encourage Parties to implement policies and mechanisms that maintain the security, traceability, and immutability of the information to avoid manipulation and data conflicts. To facilitate the sharing of data and avoid double-counting, it is crucial to assign unique identifiers to all activities and individual ITMOs. The identification of activities and ITMOs must be unambiguous throughout all the involved registries and reports. All information and documentation related to the activity referenced by the identifier must also be unambiguous and be publicly available. Distributed ledger technologies (DLT) such as blockchain can help achieve these outcomes.

The model and infrastructure pursued should also reliably flag conflicts between data. For example, where projects are listed in both national and independent standard registries, or transferred between them, reports submitted by the Parties should avoid conflict between those records. Creating a real-time link between national and independent standard registries, as well as adopting a single data model between them would enable all interested parties to track projects and accurately reflect their ownership and status.

Data model – The Secretariat should assist in the development of an international standard for carbon market data

We recommend the Secretariat to implement a data model that is fit for the needs of both Parties and market participants and coherent with reporting for other carbon crediting programmes, including the future 6.4 mechanism and those operated by independent standards. IETA encourages the Secretariat to consider using an international standard to set the data specifications to drive alignment between different registries and crediting mechanisms and accelerate carbon market development based on comprehensive, common-format data. The establishment of an independent Technical Committee reporting to the Secretariat is in our view the most suited arrangement to develop an initial data model. The International Standard Organization (ISO) – or subgroups of ISO members – may also provide a useful governance model[1] that has successfully developed and governed standards for decades through the participation of technical experts and private sector stakeholders.

We also encourage the Secretariat and Parties to continue engaging in existing public-private dialogues such as the Climate Warehouse initiative, which aims to establish a common data model and a connected real-time reporting infrastructure for national and independent registries willing to share their programme information in a global metadata layer. See Annex for more detail on the Climate Warehouse.

Data security – The Secretariat should oversee robust processes and standards

The Secretariat should oversee the development of processes and guidance around data security. Issues to be considered in this area are:

- **Secure Software and Platforms:** Requirements for information exchange mechanisms through web interfaces (machine-to-machine) between platforms, with security mechanisms following OWASP best practices for security and information transfer.
- **Standardization and accreditation:** Accreditation with the information security management systems like ISO/IEC 27001 and ISO/IEC 27002.
- **Identity manager:** Implementation of user authentication and security mechanisms to prevent fraud and hacking.
- **Traceability:** The mechanisms for information management must be easily auditable, maintain the integrity of changes, and not be easily manipulated.
- **Prevent double counting:** Interoperability between emissions accounting platforms and data management must be assured that the technology and the implementation avoids double-counting of emissions and units.
- **Data Resiliency:** Requirements to have the ability to recover data and ensure data persistence.

[1] https://www.iso.org/structure.html

Funding and capacity building – The private sector can help deliver cost-effective and inclusive solutions

Private sector actors can help to deliver the infrastructure at a low- or no-cost basis for Parties and end-users.

It is fundamental that the technology deployed is accessible to all players in all countries, so technical capacity should be scaled up and disseminated in parallel with the development of the infrastructure. Capacity building may also be delivered through existing initiatives to support market development, such as the World Bank's Partnership for Market Implementation.

ANNEX – The Climate Warehouse

The Climate Warehouse is a global market infrastructure which aims to mobilise climate action toward the Paris Agreement's objectives by enhancing transparency and environmental integrity of carbon credit transactions and international carbon markets using public blockchain.

The Climate Warehouse could serve as a public good central metadata layer that can assist interested countries and independent standards in linking together over time. It has the primary aim of establishing a common set of data specifications for tracking and reporting unitized mitigation outcomes and avoiding double counting. The common data infrastructure could assist in building additional high-integrity services. The initiative is intended to fill a unique place in the market by coordinating with government and voluntary carbon credit programmes and may help accelerate the implementation of Article 6 and support international reporting under the Paris rules.

This common data model may become important enabler of Article 6 cooperative approaches by supporting internationally compatible national registry systems. As Parties begin to report activities to the Warehouse using a single data standard (including ways to track project activities, authorisations, corresponding adjustments, and other developments), this will enable connectivity and conflict resolution between national and independent standard registries. In accordance with the view on interoperability outlined previously, the infrastructure may also support future extensions to enable Parties to transmit data submitted to the Warehouse to the Article 6 database or CARP using APIs if that is deemed desirable by its users.

In collaboration with the World Bank and the government of Singapore, IETA facilitated a six-month consultation to define the governance and financial aspects relating to the implementation of a Climate Warehouse metadata layer with a group of over 70 participants from countries and private entities. The consultation concluded in March 2022. The three entities are continuing to work to operationalise the Warehouse, with the goal to convene a governing Council in H2 2022 for a two-year Interim Period, during which IETA will also host the Interim Secretariat. Chia Network (who are also a member of IETA) is developing the software needed for the final stage of the technical simulations on a public blockchain. The product is likely to be used in the operational version as well but is being developed on an open-source basis to enable interoperability. The IT development work is expected to be completed in H2 2022, along with the legal entity, Interim Council and Secretariat. The initial data model specifications are expected to be developed over 2023 by a Technical Committee convened by the Council from relevant experts and stakeholders, likely with the help of a national or international standard development organisation.

The World Bank team has engaged with the UNFCCC Secretariat throughout the testing and simulation process since 2019. UNFCCC observers have also attended stakeholder sessions on governance and finance during the consultation. Engaging with the UNFCCC to ensure complementarity with the infrastructure mandated though the COP decisions and to facilitate reporting processes agreed in Glasgow will remain an important part of the objective for the operational Climate Warehouse.