Article 6

Infrastructure

Switzerland
April 2022
An ITMO is recorded/tracked through identifiers. It’s a record, electronic or not

An ITMO is measured in tCO2e or other metric determined by participating Parties

For CO2e, helpful to clarify IF an ITMO is equal to 1 tCO2e or X tCO2e (X≥1). X>1 is essentially an aggregation/a block that is uniquely identified and therefore indivisible

IF ITMO>1 t CO2e = value of ITMO has to be tracked as a parameter

Various characteristics/parameters, including authorized uses may be tracked as meta data (labels/tags). Changes would require recoding

Minimum requirements for a unique international identifier

Meta data/tag describing the ITMO

AA01-PE-ZZ01-2023-123-NDCIMPU-AG-0001-321-CO2
The recording and tracking method for ITMOs may be utilizing:

- **International IDs**, including universal lists of registry IDs, CoAps IDs, sectors, activity types
- **National/registry-level IDs** - more complex for tracking across registries as IDs have to be built on as ITMOs move across registries
- **Relations** for linking ITMOs and authorized entities
  - For registry implemented as an electronic database, the database may have to support a table that contains the links between ITMOs and entities

### Minimum requirements for a unique international identifier

<table>
<thead>
<tr>
<th>Cooperative approach ID</th>
<th>Host Party</th>
<th>Originating registry</th>
<th>Vintage</th>
<th>Range number</th>
<th>Authorized use &amp; 1st transfer method</th>
<th>Sector</th>
<th>Activity type</th>
<th>Activity</th>
<th>Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td>AA01</td>
<td>PE</td>
<td>ZZ01</td>
<td>2023</td>
<td>123</td>
<td>NDC-IMP-U</td>
<td>AG</td>
<td>0001</td>
<td>321</td>
<td>CO2</td>
</tr>
</tbody>
</table>

**AA01-PE-ZZ01-2023-123-NDCIMPU-AG-0001-321-CO2**
Infrastructure – international IDs of ITMOs

AA01-PE-ZZ01-2023-123-NDCIMPU-AG-0001-321-CO2

TAKEAWAY:
• Unique identifier approaches are central to facilitating easy operations on ITMOs
• Universal approach (data standardization) is worth considering, particularly in the context of cooperative approaches with large transaction volumes
• The universal approach may not be mandatory but adopted as recommended practice
• Legacy registries would have to be adapted to accommodate universal IDs as a one-off investment
• The mechanism will likely see a universal approach to identification of A6.4ERs
Infrastructure – data consistency

• Data standardization may go beyond ID and be aligned with broader reporting requirements. It may cover:
  • ID and meta data rules, including rules of universal values/lists for selected parameters
  • First transfer rules
  • Vintage rules
  • Entity authorization rules
  • Account types
  • Transactions rules
  • Transaction logs and audit trail
  • Minimum security standards

• Approach to standardization
  • Establish the data standards as universal to Article 6 (similar to simplified KP DES), OR
  • Establish data standards for the international level infrastructure (mechanism and international registry) that are a recommended practice
  • Role for a technical committee
Infrastructure – managing ITMOs across cooperative approaches

- Approaches to managing ITMOs from various cooperative approaches
  - Access to multiple registries
  - Consolidating holdings in a Party registry
    - Cancel / re-create
    - Mirror units can be created in registries based on holdings in a repository
    - Through enabling interoperability between registries

- Approaches to enabling interoperability - significant benefits from international IDs and other common data standards
  - Common communication hub with reconciliation functions
  - Direct linking via API with reconciliation
  - Direct linking enabled by DLT / public block-chains solutions
  - Common/shared platform
Infrastructure - international registry scope and functions

• Scope:
  • Recording and tracking ITMOs - how to submit an instruction to record ITMO?
  • Also recording the underlying activities/policies
• Standard registry functionalities (IDs, accounts, transactions)
• Access for Parties/authorized entities
• Managing information from authorizations
• Reporting capabilities
• Central administration vs local (Party-level) administration
• Administrator’s ToR and role in determining functionalities
• Finding model
• Interoperability with other registry (other than the mechanism registry)

TAKEAWAY:
• Some of issues may be reflected in guidance, other may be handled through a request to the secretariat to implement
Articles 6.2 and 6.4 infrastructure overview

Centralized accounting and reporting platform (CARP)

Public interface

Article 6 database
Annual ITMOs
Corresponding adjustments
Emissions balances
Identifying inconsistencies

International registry
Party N registry
Party M registry

Mechanism Information system
Consolidated registry Parties X,Y
Registry Party A

Party X authority
Party N authority
Party M authority

Meta information/reports
ITMO transfer
Optional element
Connector: API, other