

A6.4-SBM015-AA-A12

Information note

Legal, technical and financial implications of providing functionality for the treatment of financial security interests in Article 6.4 emission reductions within the mechanism registry

Version 01.0



United Nations
Framework Convention on
Climate Change

1. Procedural background

1. The Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA), through decision 3/CMA.3, adopted the rules, modalities and procedures (RMPs)¹ for the mechanism established by Article 6, paragraph 4, of the Paris Agreement (Article 6.4 mechanism), as contained in the annex to the decision. The decision requested the Supervisory Body of the Article 6.4 mechanism to develop provisions for various processes necessary to operate the mechanism, including the mechanism registry. Requirements of the mechanism registry are provided throughout the RMPs, including, but not limited to, in sections V.H, V.J, V.K, VI, VII and XI.B.²
2. The CMA, through decision 7/CMA.4, annex I, further elaborated the requirements of the registry, including, but not limited to, in its sections II.A, II.B, IV and VI.³ The CMA, through decision -/CMA.6, provided further guidance on the registry, including in relation to authorization, interoperability and availability.⁴
3. The Supervisory Body, at its eleventh meeting, considered the “Draft procedure: Article 6.4 mechanism registry” (hereinafter referred to as the procedure) and requested the secretariat to evaluate and incorporate a number of elements into the procedure; provide information on elements of the terms and conditions for users for consideration at the thirteenth session of the Supervisory Body; and prepare an information note on the legal, technical and financial implications of providing functionality for the treatment of financial security interests in Article 6.4 emissions reductions (A6.4ERs) within the mechanism registry for consideration by the Supervisory Body at a future meeting. The Supervisory Body also agreed to launch a call for public input on this matter after its eleventh meeting and requested the secretariat take these inputs into account when preparing the note.
4. The Supervisory Body, at its thirteenth meeting, considered the draft procedure and the “Terms and conditions for entities using the mechanism registry” and requested the secretariat to further develop the draft procedure for consideration at a future meeting, taking into account the guidance provided at the meeting. This guidance included the further development of the draft procedure in relation to issues of ownership or control and security interests. Relatedly, at its thirteenth meeting, the Supervisory Body further requested an analysis of the pros and cons related to framing users’ rights with regard to control versus confirming ownership of account holdings, including implications for

¹ Decision 3/CMA.3, “Rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement.” Annex. Available at:
https://unfccc.int/sites/default/files/resource/cma2021_10a01E.pdf#page=25

² Ibid.

³ Decision 7/CMA.4 “Guidance on the mechanism established by Article 6, paragraph 4, of the Paris Agreement.” Annex I. Available at:
https://unfccc.int/sites/default/files/resource/cma2023_10a02E.pdf#page=37.

⁴ Decision -/CMA.6 “Further guidance on the mechanism established by Article 6, paragraph 4, of the Paris Agreement”. Section III (Authorization of Article 6, paragraph 4, emission reductions). Available at:
https://unfccc.int/sites/default/files/resource/CMA_6_agenda%20item15b_AUV_2.pdf (Advance unedited version).

processes and procedures, corporate due diligence and execution risk requirements, and liability protections for account holders.

2. Purpose

5. This information note has been prepared to provide information to the Supervisory Body pursuant to its request to prepare an information note on the legal, technical and financial implications of providing functionality for the treatment of financial security interests in A6.4ERs within the mechanism registry, as detailed in paragraph 4 above.

3. Relationship to the recognition of ownership in the mechanism registry

6. As noted in the information note “Analysis of the pros and cons related to framing users’ rights with regard to control versus confirming ownership of account holdings”, while the issue of ownership of account holdings is related to the issue of security interests, it has been considered separately. As discussed in that information note, the legal nature of carbon credits and the ability to recognize ownership of carbon credits within the mechanism registry (due to the nature of the United Nations Framework Convention on Climate Change (UNFCCC)) is a complex developing area of law, which should be approached with caution.
7. Ownership may not be critical to all security interests as these financing arrangements are generally based on the security holder taking security over the right to something of value, which could be ownership, but could possibly also be the right to control A6.4ERs in the mechanism registry. This information note explores the legal, technical and financial implications of providing functionality for security interests which provide a security over the right of account holders to control their A6.4ERs in the registry, putting aside the matter of legal ownership of the A6.4ERs.

4. What is a security interest

8. A security interest is a method of securing an investment in a predictable manner. This would normally be a contractual instrument which gives the investor the ability to realize, enforce and recover their investment, such as a mortgage, pledge or lien.
9. Facilitating security interests through the mechanism registry could have a significant impact on the scale of investments in Article 6.4 mechanism activities, as it would provide a form of financial protection so financiers could contribute towards activities under the Article 6.4 mechanism knowing that their investment can be recovered upon a trigger event (to be detailed in the contractual arrangement) in a legally valid, binding and enforceable manner.
10. In order to consider a usual security interest arrangement in the context of the mechanism registry, security interest arrangements would be made between the financier and recipient. The role of the UNFCCC secretariat, as registry administrator, would be related to the ‘perfection’ of the security interest, which can be understood as making sure the security interest is enforceable. In cases where the secretariat’s collaboration would be needed for a financier to enforce their security interest (i.e. take control of the A6.4ERs

subject to the security interest), the secretariat would need to be notified of such security interest and provide acknowledgement of this.

5. Feedback received from the SBM 011 call for inputs

11. As noted in paragraph 3 above, the Supervisory Body launched a call for input on the matter of security interests and requested the secretariat to take these inputs into account when preparing this information note. This call for input was open for four weeks, from 3 to 31 May 2024.⁵ The Supervisory Body received nine responses to the call for inputs. Many of the responses were in favour of the mechanism registry facilitating security interests, and no responses opposed this.
12. Many submitters raised the point that enabling/recognizing security interests in the mechanism registry would be significant in the Article 6.4 mechanism successfully facilitating the scaling of the carbon market at a pace required to effectively deliver on the goals of the Paris Agreement. These submitters referenced the critical role of security interests, in particular the facilitation of security interests by account banks and other intermediaries through their perfection role, thereby enabling significant investment in renewable energy projects over several decades.
13. Several submitters suggested a system for facilitating security interests, whereby account holders would nominate a financier as an authorized representative in respect of its account. This authorized representative would (i) need to provide consent for all actions within the subjected account or under certain circumstances (i.e. upon the trigger event which enforces the security interest); or (ii) become the exclusive controlling entity over the subjected account in place of the original account holder upon a trigger event.
14. Several submitters also suggested the long-term development of a centralized registry or system for tracking and enforcing security interests which would apply across the mechanism registry and all connected registries. They referenced the Convention on International Interests in Mobile Equipment (Cape Town Convention) concluded in Cape Town in 2001, which establishes this for aviation and space equipment. The Cape Town Convention provides a mechanism for recognizing security interests and international interests over certain classes of assets and enabling interest holders to register their interest in a centralized international registry, including providing measures for the enforcement of these interests. The submitters suggested that the Cape Town Convention provides a useful precedent for developing a system for security interests across the Article 6.4 mechanism system.
15. One submitter suggested that the Supervisory Body should issue 'future A6.4ERs', which would be recognized as a financial asset (and which could also be subject to a security interest alongside actual A6.4ERs), to be translated to A6.4ERs upon issuance.

⁵ For more information, see the specific call for input here: <https://unfccc.int/process-and-meetings/the-paris-agreement/paris-agreement-crediting-mechanism/calls-for-input/cfi-2024-a64-mechanism-registry>.

6. Security interest arrangements in other carbon market registries

16. There are limited examples of carbon market registries providing functionality for security interest arrangements over the carbon credits they hold.
17. The Verra registry does not provide any functionality to facilitate security interests over carbon credits in their registry, stating in their Terms of Use that "... Verra is under no obligation to verify or otherwise enquire into the validity of, or legal title to, the [carbon credit] or any [connected, subset, linked, or other related product that is legally distinct from [a carbon credit] and has [a carbon credit] as its underlying⁶] other than the interest of the entity named as the holder of the [carbon credit] in the registry or any Approved Sub-Register".⁷
18. The Universal Carbon Registry (UCR) is similar in that it does not provide functionality to recognize or enforce security interests, and their Terms and Conditions (Terms of Use), dated August 2024, (ver. 9.0) state that "The user acknowledges and agrees that UCR does not in any way guarantee the legal title or Environmental Benefit/Attributes⁸ of the Units and the User relies on any content obtained on UCR at its own risk". Environmental Benefit/Attribute is then defined to include "all legal and equitable right, title, interest and benefit arising from or associated with" greenhouse gas reductions, thereby providing that it does not guarantee any security interest in its registry.
19. Security interest functionality in registries is more common in carbon market registries operating within a singular legal system. For example, the New Zealand Emissions Trading Scheme (NZ ETS) provides functionality to enable the recognition and enforcement of security interests in its registry. Within the registry, an account holder may authorize a third party to create a security interest over a New Zealand Unit (NZU) held in their holding account. The security holder must register as a user in the registry, and by providing the account holder with a unique code, the security interest holder's security will be registered against the account holder's account. While the security interest is in place, a block is placed on the account that prevents the affected NZUs from being traded without the consent of the security holder. This functionality for security interests in the NZ ETS is regulated by the law which governs security interests over personal property in New Zealand (the Personal Property Securities Act).⁹

⁶ Definition of 'Related Instrument', as provided in schedule 1 of their Terms of Use, Verra Registry, October 2024.

⁷ Paragraph 9.2, Terms of Use, Verra Registry, October 2024.

⁸ Defined in paragraph 11 of their Terms and Conditions (Terms of Use), dated August 2024, (ver. 9.0) as "...all legal and equitable right, title, interest and benefit arising from or associated with (i) the protection, conservation or enhancement of the environment and/or biodiversity or (ii) GHG Reductions, or (iii) any other legal and equitable right, title, interest or benefit relating to the environmental benefit as may be created either by law, Standard, contract or otherwise between UCR and the governing body of any methodology or standard, and as accepted by UCR".

⁹ Third party security interests. Environmental Protection Authority – Te Mana Rauhi Taiao, Te Kāwanatanga o Aotearoa - New Zealand Government. Available at: <https://www.epa.govt.nz/industry-areas/emissions-trading-scheme/participating-in-the-ets/third-party-security-interests/#:~:text=A%20security%20interest%20can%20only,pass%20to%20the%20Account%20Holder.>

7. Accommodating security interests through a pledge system in the mechanism registry

20. The mechanism registry could be developed to include a pledge system for recognizing and enforcing security interests, which could operate similar to established financial practices and the NZ ETS example discussed in paragraph 19 above. A possible system for the Supervisory Body's initial consideration of this matter is provided in section 8 below, which would require further work, as detailed in section 9 below.
21. This possible pledge system would facilitate the incorporation of security interests in the mechanism registry, whereby account holders are provided with the option of granting a security interest to other account holders (i.e. their financiers) (hereinafter referred to as pledge holders) over specific A6.4ERs in their accounts. Upon instruction from the account holder (jointly with the pledge holder) or an independent arbitrator, the pledged A6.4ERs would be transferred to the pledge holder's account.
22. Based on initial analysis, a pledged system over specific A6.4ERs would provide more certainty and flexibility to a security interest arrangement than would be possible through a system of appointing investors as authorized representatives, whereby entire accounts would be implicated. Additionally, a pledge system would enable the system to make use of the existing regulatory framework being developed for entity account holders in the registry, such as Party authorizations of registry users, and applicability of the "Terms and conditions for entities under development", for measures such as avoiding fraud, and managing risks of money-laundering and terrorist financing with respect to the security holders.
23. Implementing a system for tracking security interests across all carbon market systems, like the Cape Town Convention, may be considered by the CMA as exceeding the mandate of the Supervisory Body which is limited to the Article 6.4 mechanism specifically. Notably, pursuant to paragraph 48 of annex I to 7/CMA.4,¹⁰ and provide in the draft Procedure: Article 6.4 mechanism registry, information in the mechanism registry is publicly available unless confidential. This means if the Supervisory Body proceeded to develop a pledged system, pledges in the registry would be publicly available, serving a similar purpose to that of the CTC however limited to the Article 6.4 mechanism registry.
24. With regard to the suggestion that the mechanism registry issue 'Future A6.4ERs' and provide security interest functionality for them equivalent to any provided for A6.4ERs: According to paragraphs 64 and 65 of annex I to decision 3/CMA.3,¹¹ and paragraph 27

¹⁰ Decision 7/CMA.4. Annex I "Elaboration of the processes defined in the rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement." Paragraph 48. Available at: https://unfccc.int/sites/default/files/resource/cma2023_10a02E.pdf#page=43.

¹¹ Decision 3/CMA.3, "Rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement." Paragraphs 64 & 65. Available at: https://unfccc.int/sites/default/files/resource/cma2021_10a01E.pdf#page=37.

of Annex I to decision 7/CMA.4,¹² the mechanism registry shall track A6.4ERs and CERs. It would be inconsistent with this CMA guidance to introduce an additional unit type (future A6.4ERs) to the mechanism registry. Accordingly, possibilities for this functionality have not been considered in a possible pledge system.

25. Importantly, any possible pledge system would avoid the need to verify and certify ownership for the reasons provided in the information note “Analysis of the pros and cons related to framing users’ rights with regard to control versus confirming ownership of account holdings”. This means that a pledge system would need to be designed to pledge the control of the A6.4ERs as provided in the current draft operational framework of the mechanism registry. Similar to registry notations or account flags used in other registry systems, this would address concerns regarding due diligence related to how collateral is granted outside the Article 6.4 mechanism or the agreements between activity participants and financiers or other entities. By facilitating the transfer of the account holder’s existing control over the A6.4ERs to the financier, the system reduces the likelihood of transferring rights/controls beyond those originally possessed. This approach can help minimize the Article 6.4 mechanism’s exposure to granting additional rights to external financiers while offering clearer procedural rights for third parties.
26. Any possible pledge system in the mechanism registry would need to ensure that pledged A6.4ERs remain subject to the registry administrator’s authority to execute required actions under the Article 6.4 mechanism rules. This includes, for example, the authority to process credit revocations, reversals, transfers to the Adaptation Fund, and movements to the buffer pool. In that sense, any pledged A6.4ERs in the registry would be subject to the same operational rules and administrative actions as standard A6.4ERs, regardless of third-party security interests.
27. It would be important for the Supervisory Body to consider appropriate identity verification and anti-money-laundering and countering the financing of terrorism (AML/CFT) measures when developing a system for accommodating security interests in the mechanism registry. The pledge system explored in section 8 would require pledge holders to become account holders within the registry, meaning they would be subject to the identity verification and AML/CFT measures for account holders generally, and any further measures would be included in the development of these measures. Identity verification and AML/CFT management is a matter on which the secretariat would need to undertake further work in exploring any possible accommodation of security interests in the mechanism registry.
28. The secretariat cannot definitively ascertain whether a pledge system, developed in accordance with the system explored in this information note, would provide satisfactory security for financiers and investors. The Supervisory Body may wish to welcome feedback on this matter.

¹² Decision 7/CMA.4. Annex I “Elaboration of the processes defined in the rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement.” Paragraph 27. Available at:
https://unfccc.int/sites/default/files/resource/cma2023_10a02E.pdf#page=41.

8. Possible technical operation of a pledge system in the mechanism registry

29. The ability to pledge A6.4ERs would be a function available to all account holders, if permitted as part of the Party authorization.¹³ To pledge A6.4ERs, the account holder would need to create a pledge in the mechanism registry's online interface and specify who the pledge would be in favour of the pledge holder. The pledge holder would then need to accept the pledge.
30. The mechanism registry would then implement operational restrictions on the A6.4ERs subject to the security interest so as to protect it, which would include disabling all transfers of the relevant A6.4ERs. This system would not make any active declarations regarding ownership.
31. A pledge would be removed from an account upon withdrawal of the pledge from the pledge holder. If a dispute was raised regarding the withdrawal of a pledge over A6.4ERs, the following process would apply:
 - (a) The account holder must obtain a decision from a qualified and impartial arbitrator (see paragraph 39 below);
 - (b) The arbitrator would need to confirm that the pledge should be withdrawn according to the law presiding over the dispute;
 - (c) The arbitrator must provide specific instructions to the registry administrator to withdraw the pledge.
32. Upon receipt of instructions from the arbitrator (see para 31(c) above), the registry administrator would then:
 - (a) Authenticate and validate the arbitrator's decision;
 - (b) Withdraw the pledge from the A6.4ERs in accordance with the instruction received from the arbitrator.
33. There are two scenarios under which the registry administrator would transfer pledged A6.4ERs to the pledge holder (i.e. enforce the pledge):

Scenario 1: Mutual agreement

34. In this case, the registry administrator would transfer the pledged A6.4ERs when it receives approval from both the account holder and the pledge holder to transfer the pledged A6.4ERs.
35. This scenario represents a straightforward and amicable resolution, where both parties agree to execute the transfer as per their contractual arrangement.

Scenario 2: Arbitration-based enforcement

¹³ In other words, when a Party provides an authorization for account holders, it could be provided with the option of approving the account holder as a pledge holder, too.

36. If mutual agreement cannot be reached, the following process would apply:
 - (a) The pledge holder must obtain a decision from a qualified and impartial arbitrator;
 - (b) The arbitrator must confirm that the pledge should be enforced through the transfer of the pledged A6.4ERs to the pledge holder according to the law presiding over the dispute;
 - (c) The arbitrator must provide specific instructions to transfer the A6.4ERs subject to the pledge, including the details of the account to which the A6.4ERs should be transferred.
37. Upon receipt of instructions from the arbitrator (see para 36(c) above), the registry administrator would then:
 - (a) Authenticate and validate the arbitrator's decision;
 - (b) Remove the pledge from the A6.4ERs;
 - (c) Transfer the A6.4ERs to the specified account provided by the arbitrator.

9. Further work required to implement a pledge system in the mechanism registry

38. If the Supervisory Body wishes to proceed with a pledge system in the mechanism registry, the secretariat will need to undertake more comprehensive research and analysis to develop it. This would include legal work to ensure the secretariat is protected as far as possible from national disputes and to develop appropriate due diligence processes for the system.
39. The Supervisory Body would also need to consider a qualified and impartial arbitrator from which the registry administrator would receive instruction when necessary in operating the pledge system. The Supervisory Body may wish to consider internationally recognized arbitration organizations.
40. The regulatory documents likely to be impacted by proceeding with a pledge system in the mechanism registry include, but may not be limited to:
 - (a) "Procedure: Article 6.4 mechanism registry";
 - (b) "Terms and conditions for entity account holders";
 - (c) "Important information about the mechanism registry for Parties".
41. As the pledge system was further developed by the Supervisory Body, any necessary changes to the Article 6.4 mechanism's existing regulatory documents could be incorporated in future versions, and those not yet published could continue to be developed with a view to including a pledge system.
42. With regard to the ongoing operation of a pledge system in the mechanism registry, this would depend on how it was developed and implemented, as manual operations by the registry administrator are more resource-intensive than automated operations.

- 43. If developed in accordance with the pledge system explored in this information note, in a technical sense, most functions related to the potential pledge system could be automated and initiated by account holders from their interface. The registry administrator would only need to manually undertake action in the scenarios described in 32 and 37 above. As mentioned in those scenarios, the registry administrator would need to receive instruction from an authenticated and validated arbitrator to initiate the instructed release to the specified account holder. If the arbitrator’s decision specified an account number that is different from either the original account holder or the pledged account holder, as appropriate, the registry administrator would provide the specified account number for the automated transfer.
- 44. Initial estimations for implementing a pledge system in accordance with the system explored in this information note suggest that the administrative overhead for supporting the pledge system in the mechanism registry would be minimal.

10. Recommendations to the Supervisory Body

- 45. The Supervisory Body may wish to take note of this information note and request the secretariat to continue work on the possibility of providing functionality for security interest arrangements in the mechanism registry through a pledge system.
- 46. The Supervisory Body may wish to consider welcoming stakeholder input on the possibility of providing functionality for security interest arrangements in the mechanism registry through a pledge system, as explored in section 8 of this information note.

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