



INTERNATIONAL INSTITUTE FOR THE UNIFICATION OF PRIVATE LAW  
INSTITUT INTERNATIONAL POUR L'UNIFICATION DU DROIT PRIVE

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**UNIDROIT Working Group on the  
Legal Nature of Voluntary Carbon Credits**

***First session (hybrid)***  
**Rome, 10–12 October 2023**

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**SUMMARY REPORT**  
**OF THE FIRST SESSION**  
**(10 – 12 October 2023)**

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1. The first session of the Working Group on the Legal Nature of Voluntary Carbon Credits (the “Working Group” or “Group”) was held in hybrid format from 10 to 12 October 2023 at the seat of UNIDROIT in Rome. The Working Group was attended by nine members and 16 observers, including representatives from intergovernmental organisations, international development banks, industry associations, non-governmental organisations, as well as members of the UNIDROIT Secretariat (the list of participants is available in Annexe II).

**Item 1: Opening of the session and welcome**

2. *The UNIDROIT Secretary-General* opened the session and welcomed all participants to the first meeting of the Working Group. He provided background on the Project, highlighting the two preceding preparatory meetings that had been held respectively in London at the International Swaps and Derivatives Association (ISDA) and in Vienna at the World Bank. He noted that the World Bank had been sponsoring the Project since its inception and that close collaboration between UNIDROIT and the United Nations Commission on International Trade Law (UNCITRAL) was also taking place, given the similar but distinct mandate each institution had received to work in the area of voluntary carbon credits (VCCs).

3. *The representative of UNCITRAL* provided background into UNCITRAL’s mandate, specifying that the government of the United Kingdom and the Net-Zero Lawyers Alliance had proposed work on climate change and the law of international trade. He noted the strong political attention surrounding the study of VCCs and the concerns of UNCITRAL’s Member States, especially developing countries. He explained that UNCITRAL had been tasked with producing a study in cooperation with UNIDROIT, the United Nations Framework Convention on Climate Change (UNFCCC), and the Hague Conference on Private International Law (HCCH). For this purpose, UNCITRAL had circulated a questionnaire to its Member States seeking information on the legal framework for VCCs and the implementation of compliance markets in the Member States’ jurisdictions (the “UNCITRAL Questionnaire”). He suggested that the UNIDROIT Working Group focus on identifying the elements that UNCITRAL should feed into the study with the view of presenting it to its Member States in 2024.

**Item 2: Adoption of the agenda and organisation of the session**

4. *The UNIDROIT Secretary-General* introduced the Annotated Draft Agenda and the organisation of the session. He mentioned that, due to the different mandates between UNCITRAL and UNIDROIT, the discussion on the type of instrument to be created and other organisational matters were topics excluded from the Issues Paper to facilitate the joint work. However, an Addendum to the Issues Paper concerning these matters would be circulated to the Working Group members ([Study LXXXVI – W.G.1 – Doc. 2 Add.](#)).

5. *The Working Group adopted the Annotated Draft Agenda ([Study LXXXVI – W.G.1 – Doc.1](#), available in Annexe I) and agreed with the organisation of the session as proposed.*

**Item 3: Consideration of matters identified in the Issues Paper ([Study LXXXVI – W.G.1 – Doc. 2](#))**

**(a) Preliminary matters**

***Relationship with Existing Instruments and Initiatives***

6. As to the relationship with existing UNIDROIT instruments and initiatives, including the Institute’s work on capital markets and the recently-published [Principles on Digital Assets and Private Law](#) (the “DAPL Principles”), the Working Group had no additions or comments to the list.

7. With respect to the list of UNCITRAL instruments, *the representative of UNCITRAL* observed that UNCITRAL had a suite of instruments on electronic commerce that could be relevant but that any additions could be provided at a later time.

8. As to the World Bank initiatives, *the representative of the World Bank* stated that the World Bank had provided UNIDROIT with initial comments to the Issues Paper draft and that there was nothing further to add. She noted, however, that having a narrow scope going forward could help bring clarity to a space that was currently rife with initiatives.

9. *A representative from the International Organization of Securities Commissions (IOSCO)* noted a forthcoming IOSCO consultation report that would be distributed to the Group after its publication.

10. *Given the responses, the UNIDROIT Secretary-General concluded the discussion on preliminary matters, finding that the listed instruments and initiatives, although not exhaustive, were sufficient at the present stage.*

**(b) Scope of the Project**

11. *A member of the UNIDROIT Secretariat* introduced Section II of the Issues Paper, explaining that it provided a high-level overview of the background relevant to VCCs, including in relation to the development of Voluntary Carbon Markets (VCMs) and their relationship to Compliance Carbon Markets (CCMs). The Section also included an outline of the main actors in the life cycle of VCCs.

***Development of Voluntary Carbon Markets, Relationship with Compliance Carbon Markets, and Main Actors in the Life Cycle of VCCs***

12. The Working Group started the discussion by considering whether the carbon credit certificates always indicated carbon emissions that had already been reduced or removed from the atmosphere or whether they sometimes referred to emissions that would be reduced or removed in the future. It was pointed out that the concept of “verified carbon credit” referred to an existing reduction or removal of a single tonne of carbon or equivalent that is Measured, Recorded and Verified (MRV) by an independent Carbon Standard (hereinafter “Standard”). It was noted that certain Standards issued certificates on both an *ex-post facto* basis (*i.e.*, after the reductions had been verified) and on an *ex-ante* basis (in anticipation of achievements of emission reductions, primarily as a means of prefinancing). It was further noted that, from the market’s perspective, the different verification processes, standards, and issues affecting the quality of the credits were very much reflected in the price the market was willing to pay for the particular credit.

13. Additionally, the Working Group discussed: (i) the purpose of verified carbon credits to draw funds into the underlying climate project, (ii) the end destination of the units (e.g., to be used

towards voluntary climate targets or in furtherance of a compliance scheme), (iii) the distinction between “verified emission reduction” and “verified emission reduction”, and (iv) whether VCCs could be further distinguished from other units or instruments. As to the relationship with various compliance schemes, such as Article 6.4 and Internationally Transferred Mitigation Outcomes (ITMOs), it was observed that the Group should focus on the concept of a verified unit in order to avoid creating an obstacle to a market which is pulling funds into climate projects.

14. It was suggested that the Project focus on the credits that were generated by private or non-State sponsored entities. It was noted that the term “verified” could be confusing; for example, an ITMO was something that was verified, as were offset programs in compliance schemes. Likewise, the term “voluntary” was also confusing because, for example, in the context of Emission Trading System (ETS) schemes, participants could use offset credits but were not under an obligation to do so. It was thus suggested that the focus should be on who issued the credit, with the discussion centring on the Standards, rather than on what may be covered by States, especially ITMOs.

15. It was explained that the units were issued off a project that removed, reduced, or avoided carbon according to an independent standard. It was noted that the definition adopted in the Issues Paper (paragraph 39) was broad enough, *i.e.*, a verified unit or a unit issued in respect to the project that has been independently verified. While VCCs did represent a reduction or removal at the point of verification, they also represented ongoing obligations, which were stipulated in durability periods or permanence timelines, which could range from 40 to 100 years. There were also contingency provisions that went along with these contractual obligations that extended to these time horizons. The Working Group discussed to whom such contractual obligations were owed and whether they were passed along with the unit. Participants also observed that, while the credit did represent a removal or an avoidance, there was the possibility of subsequent invalidation or cancellation if, for example, the permanence period required was not respected.

16. Two types of markets were discussed: (i) the primary market, which referred to the first purchase of the credit post-verification, often made directly from the project developers; and (ii) the secondary market, which instead referred to the potential for that unit to then be sold along a chain, far away from the underlying project. It was generally accepted that the focus of the Project should be on the instrument and the trading of the instrument as opposed to the project-related aspects of the primary markets. Rather, the Project’s main focus should be the secondary market, *i.e.*, once the unit was verified and circulating as a VCC. However, since the secondary markets were still underdeveloped, primary markets, understood not as the regulatory process behind the certificate but rather as the first person who acquired the certificate post-issuance and verification, were something that the Project would need to cover. Therefore, the Project would still address the primary market to the extent that it was considering the first person to whom the credit was issued and the subsequent transfer of that credit. This would be the starting point, and then the Project could also go into the secondary market.

17. Most experts agreed on the importance of understanding the relevant contractual background and how the initial stages in the development of VCCs related to the secondary market. Yet, they emphasised that the focus of the Project should be on establishing a legal framework for the secondary market in order to support the drawing of funding into climate projects rather than looking at the quality of the unit or the broader legal complexities associated with the projects that generated the credits. Certain Working Group participants underscored the necessity of establishing a robust structure to build projects and programmes as a foundational step for the existence of a secondary market and cautioned against focusing solely on contractual regulations and the secondary market.

18. Regarding VCC Verifiers and the independence of the Standards, it was generally accepted that this was the type of question that ideally the Working Group should not discuss, this being outside the scope of the Project. It was observed that it would likely suffice to note that a good

verifier should be independent, and that the choice of methodologies be based on the best available scientific standards.

19. In order to analyse the legal nature of a VCC, the Working Group acknowledged the importance of identifying the counterparty of the primary buyer of a VCC, because that was the starting point of whom the VCC buyer might have a right against. It was noted that the entity from which the primary buyer purchased the units – known as a “project proponent” – depended on the structure of the specific project. A project proponent could be anybody, including, for example, an agent, a broker, the project developer, or a government. But the first owner was the person who had that unit issued to them in the registry of first call. That person or entity might not necessarily be a party to any of the other contracts, which was why the Group recommended to consider VCCs post-issuance and after verification.

20. Participants discussed the difference between the creation, issuance, and registration of carbon credits, as well as their subsequent negotiation and trading. In particular, they explored whether a VCC existed and had any legal effect before it was registered. It was clarified that the Standard issued the VCC into a registry account right after it had been verified that the carbon project had performed in accordance with the applicable methodology. The registry was simply a database in which a purchaser could hold their VCCs that had a unique serial identification number. Each Standard had its own registry and the registries were not interconnected. The registry had to act in accordance with the instructions provided by the VCC or account holder. When a VCC was retired, it marked the end of its life cycle; the unit was taken out of the registry, deleted, and nobody else could purchase it since it had been consumed.

21. Regarding the life cycle of a carbon credit and the question as to whom the legal rights of the VCC belong, participants observed the risk of relying on the first holder of the credit because, for example, in nature-based solution projects, the credit could be owned by the landowner and not the project proponent. It was also noted that the life cycle of a carbon credit was different depending on whether the reductions were tied to land- and nature-based solutions, or to tech projects, which followed a different process. While the original underlying projects were essential, it was agreed that the Working Group should not suggest the ideal allocation of rights under the carbon projects, because these were sensitive topics that might eventually be clarified by States rather than through private law. Finally, the Working Group considered that the carbon rights holders should be explored separately from the nature of the carbon credit itself. It was advised not to address the carbon rights holder in the initial sense, since that was a remit of the jurisdiction in which the project was located and outside the scope of the Project.

22. The Working Group further discussed and clarified the following terms:

- Reversal: the event in which the carbon that has already been verified as removed, reduced, or avoided escapes back into the environment (*e.g.*, a planted forest that burns down or sequestered carbon that leaks back into the atmosphere).
- Retirement: what happens officially when somebody instructs the registry to remove a unit out of the market so it can no longer be sold.
- Suspension: the risk of suspension and of a potential delay in the issuance of the credits is more akin to regulatory risk (*e.g.*, a suspension may occur when a host country is considering whether to allow the underlying project to occur in the voluntary market or in the compliance market). Who takes on that risk is a question addressed contractually between the parties.
- Cancellation: refers to the scenario in which the credit has been issued, but then it turns out that there are problems with the underlying methodology. Who bears this risk is also subject to contract.

23. Regarding retirement, it was further added that a VCC buyer could contractually agree with the VCC seller that the seller would retire the credit on the buyer's behalf. In such an instance, the carbon credit would not actually move from the seller's account to the buyer's account, but the seller would instruct the registry to cancel the credit. The consequences of a failure to retire would be driven by what had been agreed on a bilateral contractual basis between the buyer and the seller with respect to the obligation to retire.

24. The Working Group discussed whether any data trail was retained once the VCC was consumed, deleted, or retired in error. It was observed that it was likely possible to find out where and when a VCC had been retired as well as who had issued the instruction to retire. However, these would be matters of disclosure in any claim that arose regarding the retirement of the VCC and likely not relevant to the analysis of the legal nature of the unit. It was explained that there were mechanisms within the registry that could be applied, in limited circumstances and at the discretion of the various Standards, to determine when and in what circumstances the registries could undo transactions that had happened, such as the retirement of a credit.

25. With respect to cancellation, it was noted that parties conducted due diligence on the project to address the risk of cancellation. A parallel was drawn with due diligence conducted in relation to real property transactions, where risks were normally dealt with through insurance. The Working Group discussed the possibility of insuring the transaction in which one would acquire a certified VCC against the risk of that VCC potentially being cancelled.

26. The Working Group also addressed the potential available remedies in the event of cancellation. It was clarified that usually, in the context of transactions on the primary market, the parties would rely on the buyer-seller contract. If the cancelled credits had already been retired, reversing the process would be challenging. If the holder was instead still holding the credits, then the holder would likely be able to rely on its contract to determine who was liable for that loss, since the holder bought something which was now valueless. In general, the seller would normally have to deliver further credits from the same project, if they were available. If these were not available, then there might be alternative credits that satisfied criteria with which the buyer was comfortable. The usual final fallback was that the buyer had to be made whole for its loss, having to buy other credits in the market. In that circumstance, it would be possible to obtain credit support regarding the buyer's exposure to the seller in respect of that performance.

27. The issue might be different with respect to the secondary market, where the question became who would bear the risk in a chain. In the event of an inappropriate cancellation, participants noted that there would also most likely be a claim against the Standard that had made the cancellation. The Working Group was informed that Switzerland had introduced legal provisions addressing cancellations two years ago, although they had not yet been tested in practice.<sup>1</sup>

28. The importance of historical traceability in order to address any potential future claims and seek remedies in relation to credits that were suspended or cancelled was also stressed. Additionally, participants noted that another potential remedy was the addition by some registries of a buffer of credits, normally 10%, which acted as an insurance in some circumstances, such as reversal. In most markets, nature-based projects that could be subject to a reversal would have to divert some of the credits to a buffer pool. In the event of a reversal, the Standard would cancel the equivalent number of credits in the buffer pool, such that there would be no need to unwind the transactions that had

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<sup>1</sup> The legal provision on cancellation (Art. 973h CO), in force since February 2021, provides as follows (*unofficial translation*): "The beneficiary of a ledger-based security may demand that the court cancel the security, provided that he or she furnishes credible evidence of his or her original power of disposal and of the loss thereof. Following cancellation of the instrument, the beneficiary may also exercise his or her right outside the ledger or, at his or her own expense, demand that the obligor allocate a new ledger-based security. In addition, Articles 982-986 apply *mutatis mutandis* to the procedure for and effect of cancellation. The parties may make provision for a simplified form of cancellation consisting in a reduction of the number of public calls for presentation or a curtailment of the time limits".

already happened. It was observed that perhaps an issue could arise if the buffer had been exceeded, but such a scenario had not yet arisen. Therefore, ensuring that nature-based credits had a permanence mechanism like a buffer pool was key to their integrity.

29. The Working Group also discussed *force majeure* and negligence-based risk, but it was explained that the most important risk was regulatory risk, which remained largely unaddressed since carbon developers would generally not agree to underwrite that. The existence of carbon credit insurance companies was acknowledged, but it was noted that they generally addressed negligence rather than regulatory risk.

30. Working Group participants indicated a distinction between the “reduction right” and the “offsetting claim”. It was explained that when somebody acquired a VCC from another party, they acquired the right to make a claim that a tonne of carbon dioxide had been reduced. A subsequent purchaser of the VCC was then acquiring the right to make that claim from the person who achieved the first reduction; this was the nature of the reduction claim. The unit then remained in the purchaser’s account and represented a right to make a statement. It was only when the unit was retired that the reduction claim was converted into an offsetting claim. Thus, there was a distinction between the end use of the unit which followed from the retirement of the unit, and the reduction right that sat with the unit itself in its unretired state.

31. With regard to the stakeholders relevant to a VCC’s life cycle, participants discussed whether financiers should be considered among the main actors. Some participants advised not to include financiers, but instead consider the potential for custodians. It was also suggested that both early financiers/off-takers and local communities could be relevant actors in the early stages of the VCC process. It was observed that actors like foresters, but also the Intellectual Property (IP) holders of removal technology, would need to be considered as potential stakeholders. The Working Group explored the inclusion of certification programmes like the Integrity Council for the Voluntary Carbon Market (ICVCM) among the actors involved in the VCC life cycle. As to the role of entities like the ICVCM, one participant considered these entities as potentially providing enhancements which increased the value of the credit as reflected in its price, rather than as actors changing the fundamental nature of VCCs.

### Conclusions

32. *The Group agreed that issues relating to Article 6 of the Paris Agreement would be excluded from the scope of the Project.*

33. *The Group largely agreed that the Project should focus on carbon units post-verification and issuance, as traded in both the primary market (meaning the first purchase of the credit post-issuance and verification) and secondary market (meaning the further buying and selling of the credit along a chain). The Project should not instead focus on issues related to the creation of the carbon unit, including the quality of the underlying carbon project or the process whereby that project was verified.*

34. *The Group agreed to further discuss the issues of insurance and remedies in relation to the various risks that could affect the availability of VCCs, such as cancellation risk, reversal risk, as well as force majeure, negligence-based risk and regulatory risk.*



### **Purpose of the Project**

35. *The UNIDROIT Secretary-General* turned the discussion to Section I, Part D of the Issues Paper.

36. The Working Group agreed with excluding issues related to the pricing and accounting of VCCs from the scope of the Project since neither topic was related to private law.

37. It was clarified that issues related to accounting could relate to balance sheet accounting, how VCCs were treated in the registries, the measuring and monitoring of the projects, greenhouse gas (GHG) accounting, as well as tax accountability. With respect to balance sheet accounting, it was noted that this could provide an illustration of market treatment since, for example, financial institutions treated VCCs as a balance sheet asset in much the same way as any other item purchased. It was, however, emphasised that whether accountants categorised VCCs as property or as assets was irrelevant to their legal nature. For example, the fact that goodwill was treated by accountants did not mean that the law treated it in the same way.

38. With respect to GHG accounting, it was stated that this would naturally be excluded by the decision not to go beyond the verification stage. Indeed, this kind of accounting would be within the domain of the register and the methodologies adopted by the Standards, and thus outside of the scope of the Project. As to accounting in terms of the accountability of regimes for tax purposes, it was noted that the Group should first define the legal nature before addressing accountability and related challenges.

### **Conclusions**

39. *The Working Group agreed that issues relating to the pricing and accounting of VCCs were outside the scope of the Project.*

## **(c) Content of the future instrument**

### **Definition of "carbon credit"**

40. *A member of the UNIDROIT Secretariat* introduced Section III, Part D of the Issues Paper concerning the definition of "carbon credit". It was noted that the Issues Paper addressed a few of the many terms that were used within this space, such as carbon emission allowances and results-based climate finance, which were distinguishable from what was normally referred to as carbon credits or carbon offsets. It was also noted that, at the exploratory stage, certain concepts had emerged to guide what was to be included in the scope of the Project, namely: (i) verification, and (ii) the transferability or tradability of the units.

41. With respect to transferability, the Working Group observed that it would be highly unlikely to find VCCs which were not transferrable since the creation of a carbon credit was a non-trivial process that was carried out for the purpose of monetising or transferring the unit. As to the difference between transferability and tradability, it was noted that transferability referred to the possibility of transferring for no consideration and was an inherent legal characteristic independent of whether there was a market. Transferability was thus a wider concept than tradability; in order to have tradability, one must have transferability, but one could have transferability without tradability.

42. It was further clarified that even if a carbon credit was issued but was never transferred, that did not mean that the carbon credit was not capable of being transferred. However, if a carbon credit was issued under circumstances that provided for an absolute ban on transfer, then there would be some difficulties in saying that that particular credit was capable of being subject to proprietary

rights. It was noted that, under French law, there were carbon credits labelled “*bas-carbone*” that were not transferable by law.<sup>2</sup>

43. It was observed that one of the ways that the Group might be able to reach the conclusion that VCCs were capable of being subject to proprietary rights was by defining them as things having the features that enable them to be capable of being subject to proprietary rights. However, this approach could be problematic if completely and utterly non-transferable credits were included. It was nonetheless observed that in civil law jurisdictions it was possible to have an object which was subject to property rights, but which could not be transferred.

44. With respect to verification, the Working Group agreed that the fact of verification should be part of the final analysis. What should instead be excluded was the quality of that verification, including reference to whether the verification was independent.

45. As to the definition of “voluntary carbon credit”, it was clarified that the Working Group would not purport to define what the units were, but rather develop a definition for the purposes of defining the scope of the Project. It was noted that the definition applied at paragraph 39 of the Issues Paper could be used. Working Group participants also observed that: (i) the term “credits” should not be used interchangeably with the term “offsets”, the former referring to the instrument and the latter connoting a claim against the certificate; (ii) only the term “carbon credit” should be defined; (iii) results-based finance was just one way in which crediting could be used; and (iv) VCCs had to be distinguished from emission allowances since the latter were “permits to pollute” used in the compliance space and issued by a governance body or government organisation.

46. In addition to the fact of verification and the capability of being transferred, the Working Group considered whether the definition of a VCC should include the capability of being retired as a further inherent characteristic of the unit. Fungibility was also raised as a possible additional criterion to determine the scope of the Project. However, participants disagreed as to its relevance and urged caution about including fungibility because of the way in which the market was developing with pools of liquidity in respect to different subsets of carbon credits.

### Conclusions

47. *The Working Group agreed on only focusing on the term “carbon credit” in the definition.*

48. *It was tentatively agreed that the relevant criteria to the definition of “carbon credit” would include (i) transferability, (ii) verification, and (iii) capability of being retired.*

49. *Fungibility would be discussed in the context of remedies, but not as part of the inherent characteristics of a carbon credit.*

### ***Legal Nature of Voluntary Carbon Credits: Can VCCs be the Subject of Proprietary Rights?***

50. *A member of the UNIDROIT Secretariat introduced Section III, Part B of the Issues Paper. She explained that the Issues Paper approached the question of the legal nature of VCCs by considering whether VCCs could be the subject of proprietary rights through an analysis of (i) the substance and (ii) the form of a carbon credit. With respect to the substance, a carbon credit could be seen as a bundle of rights or as intangible property. A key question in this analysis was what the remaining rights and obligations were, if any, once the VCC had been issued. With respect to the form, the*

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<sup>2</sup> See art. 4 of the *Décret n° 2018-1043 28 November 2018*, available at <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000037657959>.

principal question posed to the Working Group was the extent to which VCCs could be seen as digital assets and the extent to which UNIDROIT's work on digital assets could help inform that conversation.

51. The Working Group emphasised that if the goal was to use the VCM as a means to raise and transfer finance for climate change, and if that was the ultimate purpose of being able to deal in voluntary carbon credits or verified carbon credits, then one had to make the credits property, because otherwise one was not going to attract the necessary scale of investment that was needed in order for carbon credits to become a vehicle for raising climate finance.

*The "Substance" Approach: Bundle of Rights and Intangible Property*

52. The Working Group thus considered how the conclusion that VCCs could be the subject of proprietary rights might be reached and justified according to private law reasoning. It was observed that one possible approach was to say that the holder of a VCC had a claim or a right against an identifiable person who owed an obligation, and that that right or claim was transferred when the VCC was transferred.

53. It was explained that once the issued VCC was purchased, the contracts referred to in the Issues Paper associated with the underlying project were not transferred along with that VCC. Instead, what a VCC buyer purchased was a unit within the registry. Thus, the contract that was taken on by the VCC buyer was the Terms of Business of the registry.

54. It was therefore suggested that the claim held by a VCC holder could be a claim against the registry, which could be a right to retire the carbon credit on the instructions of the VCC holder. It was explained that one of the most important characteristics of a VCC was that it could not go on forever; rather, it could only be reported once and then it disappeared because it had been retired and, and unless the credit had been retired, it could not be used in reporting. It was thus proposed that the legal nature of a VCC was the right to retire against the registry which travelled with the VCC and did not come from any other source, such as contract. Further, in order for a VCC to be the object of proprietary rights, the right to instruct the registry to retire the credit would have to be coupled with another very important feature of property, which was individuation. It was observed that these were two features that property and private lawyers would be comfortable relying on to find that VCCs were capable of being the subject of proprietary rights in a private law sense.

55. A query was raised as to whether one way of defining the VCC was as an intangible asset. It was noted that, at the moment, there was no particular existing category of intangible assets that might fit, but the suggestion was made to look at the components of what legal systems normally took into account when defining an intangible asset to see if it would then be possible to potentially create a new category of intangible asset.

56. In response, it was noted that the relevant characteristics included the fact that the VCC must be identifiable; this characteristic was met because every single VCC was identified through a unique serial number. While information on its own could not be the subject of proprietary rights, a right or a claim was capable of being a proprietary right. Thus, the focus of the analysis was to get to the bottom of what that right or claim was. The single right that always travelled with the VCC, no matter where the VCC came from, was the right to retire the VCC. When a VCC was retired, it had in effect been consumed. It was taken out of circulation and could no longer be transferred from one person to another. While a record of that retirement existed, you could not do anything with the VCC anymore. That was the end objective of the unit.

57. Some hesitation was nonetheless expressed in relation to identifying the object of proprietary rights as the right to retire, noting that defining what you had by what you cancelled could come across as somewhat paradoxical and circular. It was observed that the problem faced by the Group was that certain legal systems had doctrinal problems with recognising proprietary rights in certain

things that were not yet there. It was thus suggested that UNIDROIT, as an international institution, could state that there was a new object of intangible property rights called a VCC and that it was transferable and tradable, and that what it contained depended very much on the contractual arrangements. Such an approach was not without precedent. In the DAPL Principles, UNIDROIT asked national legislators to accept Bitcoin as proprietary rights, and for some legal systems that was a significant novelty. Thus, it was observed that the fact that national legal systems now had a problem addressing VCCs did not exclude that UNIDROIT could suggest that they should accept them as property in the name of the fight against climate change and in recognition of the market reality.

58. The *UNIDROIT Secretary-General* acknowledged the ingenuity of the proposal to define the nature of VCCs by the right to retire but nevertheless expressed hesitation in defining life based on the fact of death. He noted that such an approach did not really define what a VCC was. He also observed that, at least from a civil law perspective, the right to transfer was a right. It was a subjective right, like the right of use of the VCC. He suggested that perhaps one could have a “bundle of rights” approach, which included but was not limited to the right to retire. He encouraged the experts to continue exploring this.

59. The Working Group addressed how the right to retire approach would work in the context of the growing convergence between the compliance and voluntary markets. It was observed that, in the scenario in which a VCC was used to meet a compliance obligation, the holder did not have an unimpeded right to retire, because it would depend on whether the compliance market recognised such a right. It was also noted that the analysis under the compliance scheme would be quite straightforward, in that carbon credits in compliance markets were basically transferable immunities and immunities were a form of rights because they gave one immunity from prosecution. The problem was that the same analysis did not necessarily apply in the context of the voluntary market, as there was no obligation to offset or reduce emissions. That said, VCCs might allow the holder to gain immunity in certain circumstances. For example, if a corporate made certain statements without the VCCs to back up such statements, the corporate could encounter regulatory trouble. The problem with this approach, however, was that not everybody was under that sort of regulation, meaning that there would be holders of VCCs who did not require such immunity.

60. The possibility of an enforceable warranty held by the first and all future holders of the VCC that one metric tonne of GHG had been removed from the atmosphere was also discussed. It was noted that, if it could be said that there was an enforceable warranty, then there was also an obligation. Such an obligation did not have to be from one of the contracts. The problem would be resolved if, at the end of all the various contracts, the Standard, when it put the VCC on the registry, warranted that it had removed one metric tonne of carbon; what would be traded would then be this warranty by the Standard. However, it was observed that several Standards were hesitant to provide any warranties because the VCC field was such an evolving area. The Standards saw themselves as just providing a platform through which the credits were transacted.

61. It was also suggested that verification could be seen as a warranty, since verification was a statement that something is true and has happened. If it turned out that the issuing body was completely fictitious and had not carried out any verification, the end purchaser would not be bound by any of the project-related contracts and could have a right to challenge the issuing body. Thus, it was observed, the VCC buyer bought that verification or that warranty, and also bought the right to instruct the verifier to either transfer the VCC to another party or to simply hold it in the buyer’s account *ad infinitum*, or to retire it and remove it from the markets so that nobody else could purchase it.

62. It was further noted that, under both English and Washington, D.C. law, a VCC issued by Verra was capable of being considered property under the bundle of rights test. This was due to the fact that Verra was structured in a way to enable the VCC holder to have rights against each of the Standard, the verifier and the project owner, even though the VCC holder had no contractual nexus

to them. In particular, Verra required project developers or proponents to provide the Standard and all of the constituents who participated in the process, by way of a deed, a warranty and a representation about the nature of what was being offered. Because such a warranty was provided by deed, essentially the consideration or lack of consideration issue was addressed, and because it was an open deed to a group of people who were within the Verra framework, it was not necessarily tied to a contractual privity situation. And because there was both a deed of issuance and a deed of registration, a holder of a Verra credit could have recourse both in the event of a breach of a representation made at the registration stage, as well as in the event of a misrepresentation concerning the issuance of the unit itself. In addition, the VCC holder also had a cause of action against the verifier, because the deed of representation the verifier issued was also similarly open to all of the Verra community, meaning the direct project proponents, any buyer who happened to be the holder of the Verra units, as well as anybody who was an account holder and who was holding the units within their registry. So, Verra units were structured and designed to create a series of rights that were capable of being claimed against somebody, irrespective of whether they had a contractual nexus to them.

63. However, this was limited to the way Verra was designed and structured. The same conclusion did not apply to the Swiss law analysis conducted in relation to credits issued under the Gold Standard, as the Gold Standard was not set up to create a series of claims that could be made against somebody other than the contractual counterparty with whom one was trading. Thus, the only way that the holder of a Gold Standard could get back to the original project developer or the project owner was simply suing all the way down the chain. These were features of contractual personal rights, not features of proprietary rights, because proprietary rights should not depend on there being a series of contractual claims. The Verra structure, as opposed to the Gold Standard structure, created an independent right simply because one was a holder of a Verra unit. That was divorced from the series of contractual rights and, at least from an English law or a D.C. law perspective, met the characteristics of intangible property right.

64. Yet, caution was urged against using the Verra structure as the basis for the analysis, since it did not apply to all Standards and, as the market materially scaled, it was also unlikely that such an open approach to the transfer of liability would survive. Project developers or verifiers would likely not accept this chain of liability given the number of participants to which they could potentially be liable. Moreover, given the increasing criticism concerning the integrity of the methodology employed by Verra, it was recommended the Working Group not focus on any particular Standard model, but rather that it focus the analysis on more general features.

65. Indeed, it was also suggested that, given the existence of multiple Standards and a market in constant evolution, the Group consider the fact that registries might change their behaviour if presented with a compelling reason to do so. For example, just because not all registries had created rights of action between parties as Verra had done, that did not mean that, with a recommendation from the Group, it would not be possible for additional registries to adopt those changes. Instead of trying to pin down the nature of VCCs in the midst of a constantly evolving market, the Group could define some options or define an ideal approach.

66. *The UNIDROIT Secretary-General* noted that developing a framework that was based on private registries which could be amended at any time made that framework completely volatile. Thus, if one was to base such work on the registry, it had to be done in a way that was at least analytical, otherwise the risk was that the work would be based on a fixed photo of the existing reality which might very well change. And that, he noted, was exactly the opposite of what the Group was supposed to do.

67. It was further suggested that the Working Group, in its quest to issue a recommendation that was jurisdictionally neutral, identify the minimum common denominator between the different approaches adopted by civil and common law countries. Under such a minimum common

denominator approach, what would be considered were the features of a VCC that were consistent in the way property was defined, as a matter of both common and civil law principles. And to the extent that a VCC unit had as many of them as the Group could agree on, then the Group could reach a conclusion as to what type of rights were capable of being applied to the holder of a VCC unit.

68. It was further proposed that what was being traded with a VCC was an exclusive claim to that reduction or removal because that was the value of the credit (e.g., an environmental claim). However, it was noted that the term “claim” in such context was being used in a non-technical way, *i.e.*, the reputational ability to say that you did something. The Group was urged to differentiate between rights and claims and it was suggested that a VCC should not be seen as a claim in itself, but as evidence of a claim. It was further observed that there was no prescription on who could make what type of claims, at least as the law stood at present. Different companies signed up to different Standards and chose to make different claims; that was their choice, unless the type of claims that could be made were regulated.

69. It was also noted that conceptualising VCCs as the right to make a claim that one was the person who effectively owned that emission reduction would be akin to owning a fact and there were no prohibitions on lying *per se*. It was observed, however, that if such a false claim were made to United States consumers it could be actionable, including by competitors or the Federal Trade Commission, as a false and misleading statement.

70. To the extent it was not possible to identify any rights, it was noted that this did not mean that the proprietary analysis was over. For example, VCCs could be brought into some general concept of intangible property, whether under common or civil law. When it came to intangible property, the problem seemed to be that there were lots of definitions of property across legal systems. An additional problem was that a VCC provided a certification and mere information could not be the subject of proprietary rights as mere information was basically non-rivalrous. It could be duplicated, and shared with different people, but nobody had the required exclusivity in relation to that information.

71. A distinction was drawn between the nature of the certificate itself and what the holder could do with that certificate. As to the former, the fact that the certificate could only be held by one person at a time could potentially indicate that the certificate could be the subject of proprietary rights. As to what the holder could do with the certificate, it was observed that the certificate could be used in the context of a compliance scheme as a form of immunity against prosecution, since it provided the holder with the legal ability to do something that one otherwise would not be able to do. However, VCC holders may not be subject to compliance schemes. Thus, looking at what the holder could do with the certificate may not advance the proprietary rights analysis.

72. It was observed that restrictions generally existed in both common and civil law countries on what could be the object of proprietary rights. It was recommended that the Group further consider the restrictions and necessary features for something to be property in various jurisdictions to try to identify a right or a claim embodied in the VCC. With respect to a VCC’s ability to be retired, this could arguably mean that it could be seen as rivalrous, or that it was “exigible”, meaning only one person could have it and use it at a time.

*The “Form” Approach: Factual vs Actual Form*

73. The Working Group turned to discussion of the form approach. It was stressed that one had to be careful in terms of what was meant by form. It could refer to factual form (*i.e.*, whether the VCC was issued as a paper certificate or as a digital asset held on blockchain, on a computer or ledger) or to the VCC’s actual form (*i.e.*, such as the fact that it was registered and could be retired).

74. As to the former, it was noted that if a VCC were issued in the form of a paper certificate, there would be no doubt that it could be the object of proprietary rights and that it could be traded. However, the problem was that, in the case of a paper certificate that was tangible, nothing about that paper certificate, apart from the fact that it was a piece of paper, meant that it could be the subject of proprietary rights. It was merely information written on a piece of paper. The information could not be the subject of proprietary rights. It was the paper that was the subject of proprietary rights. Mere information which could not be the subject of proprietary rights could, however, be put in a form which could be the subject of proprietary rights, as with a tangible certificate, *i.e.*, a piece of paper that could be transferred.

75. With respect to digital assets, in the context of the DAPL Principles, the DAPL Working Group had homed in on the concept of control which became the core way digital assets were defined: an electronic record, which in itself could not be property, which was capable of being a subject of control. However, it was observed that the form approach as applied in the DAPL Principles might not work in the VCC context as the requirement that only one person could control the asset might not be satisfied. In the digital asset context, control was defined as a factual rather than a legal concept. In the DAPL Principles, the person who controls the digital assets does so as a matter of fact; because of the way digital assets are set up, there was a technical system that prohibited anyone else from controlling the asset. In the context of VCCs, however, there was nothing inherent in the system and one would rather be relying on the registries which did not currently work like blockchains and did not provide the degree of control that blockchains provided. Thus, because there were registrants and not blockchains with private keys, with VCCs one needed to discuss legal rather than factual control. In other words, in the VCC context, control was understood as having rights against people, which brought the focus back to the registry, *i.e.*, the right to give instructions to the registry, the right to tell the registry to retire the credit, and so on. It was suggested that perhaps the analysis should centre on a mixture of rights against the registry and those rights giving the form that enabled the VCC to be controllable, which was one of the crucial aspects of property.

76. It was clarified that a registry was simply an account where the VCC was recorded and held, and the security of that account was generally robust. Just like with a bank account, the account holder would be sent a statement noting what he or she owed and providing proof of transfer. When someone bought or sold a VCC, he or she entered into a bilateral transaction where the seller instructed the registry to transfer the VCC into the buyer's account and the registry, as the custodian, acknowledged that instruction and then provided notification that such transfer had occurred.

77. It was observed that the EU had adopted the term "financial instruments", which roughly corresponded to securities in the United States and encompassed both centrally and de-centrally registered or recorded rights and obligations, including shares and bonds, as well as derivatives that were centrally registered in the classic way. In these scenarios, one had property rights in one's shares and bonds, even if they were centrally registered. The apparatus of financial law had also been extended to crypto assets and digital assets; for example, when a share was tokenised and put on a blockchain, it was considered a financial instrument. It was thus suggested that the form in which the asset was recorded would not matter; what would be affected instead would be the rules on transfer, as one would have to distinguish between the type of form or the type of container.

78. Other participants disagreed with the comparison to financial instruments, noting that the concept of a financial instrument within the EU and the US was a regulatory concept and generally subject to financial regulatory bodies. Financial instruments were obligations and rights, and there was no question that a financial instrument existed whether or not it was registered. If the register were to cease to exist, the debt would remain.

79. On the other hand, the Working Group considered that one of the problems with making the form determine the nature of the VCC could be that if the form disappeared, the VCC might disappear

as well. It was not the same as in the context of the DAPL Principles, which relied on the pure form, meaning the fact that the assets could be controlled by one or more people who held the private key.

80. The importance of the distinction between the object that was being recorded and the record that the object existed was further specified. So as long as the right existed apart from the record, the record could be blown up, but the right still existed. However, if it was said that the right was embodied by the record, then the moment that record ceased to exist, the right also ceased to exist.

81. In response, it was noted that there were very old rules on negotiable instruments that allowed recourse to courts to claim ownership over claims embodied in a piece of paper or a bill of exchange if that piece of paper or bill of exchange was destroyed. The Swiss legislature had used the same procedure for crypto assets and, therefore, one could still claim the underlying assets if one could prove to the court that those private keys had been lost. In the context of VCCs, it was further observed that the Terms of Business of the registries were very much worded in the way of custodial accounts. If the registry went insolvent or there were technical issues and the data was deleted, the VCC would still exist; it would simply reappear in a new registry.

82. However, certain participants disagreed. It was observed that the bills of exchange and check examples did not work because they embodied claims and, with respect to VCCs, the assumption was that they existed independently of claims. When dealing with an algorithmic Stablecoin, or a pure crypto like Bitcoin, when the private key was lost, then there was nothing that could be done. The court could technically declare the owner, but there could be no transfer, no sale, etc. Thus, if the VCC did not embody claims, if the container went, the VCC also went. In addition, if the VCC holder did not have the right to have the VCCs recreated in another registry, and the registry decided not to do that, then in the event the registry was destroyed, the VCC holder lost everything.

83. It was noted that one of the distinctions between digital assets and VCCs was that digital assets, at least some of them, were not linked to anything. Digital assets were rather things that existed in fact because the technology had been set up and which had certain characteristics that allowed them to be the subject of proprietary rights. As to VCCs, the features of VCCs that could be relied upon in the form analysis, with the role of the registry being key, were identified as: (i) specificity or individuation; (ii) exclusiveness; (iii) transferability; and (iv) exigibility. If there were no registry, none of these features would exist. Thus, the registry was of particular importance when it came to VCCs and, in that sense, VCCs were different from digital assets.

84. It was however observed that the registries were currently unregulated and run by non-classic financial market participants. Their efficacy was thus concerning to many heavily-regulated institutions such as banks, which were worried about issues including hacking, continuity, governance, etc. It was thus noted that the nature of registries in the short to medium term was likely to change. Registries were expected to become heavily regulated and subject to rules around continuity of the business and the transferring of the assets in various circumstances.

85. *The UNIDROIT Secretary-General* intervened to make a point about the scope of the Project. He noted that it was clear from the discussion that private registries were a key part of the legal nature of VCCs and of anything which concerned actions regarding VCCs. He thus asked for the Group's views on whether, in the interest of avoiding fragmentation and to provide some harmonisation, there would be merit in exploring work on the elements of private registries which concerned the trading of VCCs. He clarified that this work would not involve delving into the regulatory matters which concerned registries. Rather, the analysis would focus on the types of functions played by the registries and whether it would be desirable for the registries to play any additional functions. He observed that, perhaps, the answer could be that this was a question of freedom of choice, and the market should decide. However, he stated that this kind of work might complement the Group's discussion thus far and could aid in moving forward. The Working Group agreed with the Secretary-General's suggestion. It was observed that the Group was quite focused



on rights against the registry, including whether it was merely the right of retirement, or whether this could be expanded to include rights to control and to effect transfers.

### Conclusions

86. *The Working Group agreed that, in order for the VCM to scale, VCCs would need to be capable of being the subject of proprietary rights.*

87. *As to the substance, or bundle of rights approach, the Working Group explored the possible transferable rights held by VCC holders. It was discussed that some Standards (i.e., Verra) had been structured in a way to allow a VCC holder to have rights in rem against several entities (such as the project developer and the project verifier), but this was not the case with respect to all Standards (e.g., Gold Standard) and it was observed that the structure might change as markets scaled. A possible transferable right that was identified for discussion was the right of the VCC holder to instruct the registry to retire the credit. Nonetheless, the Group was encouraged to continue considering whether any additional rights might be identifiable, such as the right to transfer the VCC or the right to legally control the VCC.*

88. *As to the form approach, the risk of the registry being hacked or destroyed and the holder being left with nothing was discussed; differing views were expressed as to whether the VCC continued to exist in such circumstances. The Working Group generally agreed that certain features of VCCs could be relied upon in the form analysis, namely: (i) specificity or individuation; (ii) exclusiveness; (iii) the fact that VCCs are capable of being transferred; and (iv) exigibility, meaning that the VCC can only be used once and if it is retired it no longer exists.*

89. *Participants agreed to continue discussing both the bundle of rights and the form approaches.*

90. *The Working Group agreed to further explore the elements of private registries which concerned the trading of VCCs, including how the VCC registries might be advised to link adequately with public or private registries of secured transactions.*

### **Ownership of Voluntary Carbon Credits**

91. *The UNIDROIT Secretary-General turned the discussion to Section III, Part D of the Issues Paper, addressing the ownership of VCCs.*

92. *The Working Group commenced the discussion by addressing the legal nature of the act of registration of a VCC. It was suggested that the VCC came into existence before it entered the holder's account on the registry. There was a "scintilla" of time which was pre-issuance. At this time, the project was validated and verified and the Standard agreed and undertook to issue the unit into the account of the project proponent. Such issuance could happen immediately or in a matter of days. Although the unit did exist in concept before it went into the account, the actual registration was the act of issuing the unit into an account.*

93. *An illustration of the "life of a carbon credit" based on the analogy of a child being conceived was provided. It was noted that the "credit starts to be conceived" when the carbon developer and the owner of the asset first chose a methodology from a Standard and started to elaborate the Project Design Document (PDD) through which they submitted the intention to validate the project. At this point, the parties had an expectation of a right to be issued credits. If the developer fulfilled the steps required by the Standard, then it would have the project verified and request that the registry issue the certificates. This was the critical moment when the "credit became alive". The act of registration was the combination of those steps which culminated in the issuance of the VCC. In sum, without the registry and the Standard, the VCC could not be produced.*

94. It was stressed that a distinction needed to be drawn between people getting together because they wanted to plan an activity that led to an emission reduction and the actual achievement of the emission reduction. The latter happened because there was a methodology that was pursued and which led to an abatement and avoidance or removal of a tonne of GHG equivalent. That was the activity that led to the conception – not writing PDDs, not getting a verifier. These activities were rather a means to an end to achieve evidence through a third party (e.g., Verra or the Gold Standard) of an act which the project proponents had committed to do. That was still only an emission reduction and not a VCC.

95. It was further noted that the verified carbon unit needed to be created in a database, and the role of the registry was to help facilitate the creation of that serialisation as evidence of something that was acknowledged by the Standard. The register and the registry could be two different things. A register could be simply a database, and one of the functions that the register or the database performed was to ensure that the same project was not benefiting from multiple issuances. Thus, the database facilitated transparency, enabling people to track and trace what was going on. Yet, that was still only a database, and nobody, including Verra, claimed that it was a database of title; if it were to be a database of title, then it would have to be recognised at law. Land registries or motor vehicle registration systems, for instance, were all mandated by statute and recognised at law, and therefore had a particular status as being determinative of the evidence of good title. VCC registers were not records of legal title. In addition, the registers' own rules and Terms of Business normally provided for freedom of contract, specifying that the parties were free to determine how they would transfer title or the interest in their underlying credits to each other. Where the register acted as a facilitator of the transfer process, it was to react to a bilateral arrangement carried out between the individuals which was in the individual's interest to then ensure it be brought to the attention of the register, so that the register could adjust the account record. Thus, the transfer of title happened on the basis of bilateral contractual agreements, with the registers simply updating their records on the basis of instructions received from the parties.

96. A question was raised as to whether the registries were searchable by the public and whether it was market practice to register what people thought of at least as transfers of ownership. In response, it was clarified that the registry was a confidential system and details such as in relation to price were not publicly available since these were agreed upon between the parties completely outside of the structure of the registry. In addition, one's position in the credit was highly confidential information, as was the identity of the owner. However, some information, such as validation and verification reports, was shared publicly by the registries. On the Verra registry website, for example, it was possible to look up project developers or the project, as well as how many credits were issued and in what year.

97. Even though registers generally had no legal value beyond evidence unless there was legislation saying so, it was noted that the key question was whether a VCC existed before the act of registration. If a serial number in a register was one of features the Group was trying to identify to meet the criteria of both common law and civil law systems to recognise that VCCs could be the object of a property right, then, by definition, there was no VCC until registration. There was no *scintilla temporis* until the registration. Indeed, the Working Group stressed that the point at which the credit became relevant for purposes of the Project was when that credit was reflected in a registry account, it had a serial number against it, and the ownership was clear from the registry holding. It was suggested that perhaps the act of registering represented the VCC coming into existence and receiving a serial number. With respect to retirement, it was clarified that if a party was retiring the credit on behalf of another party, the registry needed to be notified.

98. While it was recognised that the register seemed to be operating more like a custodian than a register, it was nonetheless noted that registries still played an important role, in particular with respect to: (i) the individuation of the VCC, as the registry provided the VCC with the serial number;

and (ii) the retirement of the VCC, which was done by the registry on the instruction of the account holder.

99. *The UNIDROIT Secretary-General* observed that several questions arose from the discussion, including concerning the interoperability of registries, how to use registries for carbon credit transactions, as well as the relationship between the more traditional registries and the Standard registries. He noted that such issues were particularly important in the context of secured transactions and raised a host of complexities given that registers which were purely private, not title based, and with a lot of confidentiality embedded, seemed to be of a starkly different nature than traditional registries. He further observed that VCC registries would not be recording secured transactions in VCCs since they were not publicly run and were not title registries. For secured transactions, it would thus be necessary to refer to other registries and consider how the systems could be made compatible.

100. With respect to the risk of double-counting, it was observed that this was more of a theoretical than a concrete risk. It was explained that it would be difficult for the exact same project to be registered twice and tools like the CAD Trust enabled market participants to check that.

101. It was clarified that the off-registry security interest concept was not new. For example, that was how the EU and the UK ETS systems worked; the registries for the ETS systems would not take or register a security and there was no intermediary concept there. Under English law, an off-registry security was taken, a pledge or assignment was done on a bilateral basis, and the notification, acknowledgement, perfection happened off-registry. The UK ETS registry would just not acknowledge that. It was explained that these registries had basically made a decision that they would not be part of that process. However, it was noted there was no need for intermediaries to create a security over the asset. While a VCC was not a security, there were several examples of non-governmental registers and regimes that worked fine.

102. However, it was further noted that, in many jurisdictions, a security right would have to be registered in a secured transactions register. The Group would therefore need to explore whether it would be possible to take a security right over this type of object and affect it or make it effective against third parties by something other than registration in a secured transactions register.

103. The discussion shifted to the question of what happened once a VCC was retired and whether the VCC's legal existence came to an end at that point. Participants clarified that, upon retirement, the registry would cancel the position in the account, meaning that the credits would no longer exist in the system and would no longer be transferable or owned by anyone. However, it was noted that some rights might survive, such as the ability to claim that the credit had been used. So, normally, what would happen was that the holder checked a box to indicate that the credit had been retired, but the credit would not disappear from the database. Rather, one could access the registry and see that the credit was retired and on behalf of whom it had been retired. It was observed that, once retired, a VCC could likely no longer be the object of proprietary rights since at that point the VCC could no longer be transferred, nobody could own it, and nobody could take security over it.

### Conclusions

104. *Working Group participants agreed that VCC registries were not registries of title but that they nonetheless played an important role in the proprietary rights analysis given that registries provide the VCC with its serial number and registries retire VCCs upon the instruction of the account holder.*

105. *The Group expressed different views as to whether a VCC might technically exist before registration. However, participants agreed that it was the act of registration that individuated the*

VCC with a serial number, and this was the point at which the VCC became relevant for purposes of the Project.

106. Moving forward, the Working Group agreed that it would be beneficial to further analyse the interoperability between registries and how they worked in practice.

### **Transfer of Voluntary Carbon Credits**

107. The UNIDROIT Secretary-General turned the discussion to Section III, Part E of the Issues Paper, addressing the transfer of VCCs.

108. The Working Group emphasised the importance of further distinguishing the contract between the seller and the buyer and the fact that VCCs might be capable of being the subject of proprietary rights. If the transfer was deemed to be a transfer of proprietary rights, then the question was what happened if defective proprietary rights purported to be transferred (for example, if the carbon credit was transferred without authorisation or by someone who did not own it and that credit was then transferred on to someone else).

109. In response, it was explained that, under an Emissions Reduction Purchase Agreement (ERPA) or the equivalent, the seller made certain representations around ownership and also typically included representations around the fact that the title being transferred was unencumbered. If there was a breach of such representations, then the buyer had the right to sue for damages or some other remedy. For example, a misrepresentation might constitute an event of default within the contract which might lead to termination of the agreement, and the buyer might be able to claim the cost of buying alternative credits in addition to damages. These would be the bare minimum protections expected from the buyer.

110. The Working Group considered whether it would be helpful to have an innocent acquisition rule, *i.e.*, a provision which provided that if somebody bought something and he or she had no notice that the person from whom he or she bought it did not own it, the buyer nonetheless obtained good title. Such a provision had been included in the DAPL Principles which provided that, under certain conditions, if somebody obtained control of a digital asset and was an innocent acquirer (as defined by the rules of the relevant State), then that innocent acquirer would take free of competing claims from previous owners. It was explained that the reason for including such a provision would be to recommend, for most jurisdictions, either a change or a clarification in the law, because it would not be a given in many jurisdictions unless something was said about it. Participants generally agreed that an innocent acquisition rule, while not absolutely necessary, would be beneficial to facilitate trade and scale the market.

111. The question was raised as to whether the Group should also consider Article 6 issues and regulatory problems related to the transfer of VCCs. An example was provided of a registered or ongoing project being cancelled because the host State prohibited the transfer of the credits outside of the country, thus having an impact on the whole transaction. It was noted that the situation where a VCC was not transferable or tradeable due to regulatory changes was outside of the control of the parties and was a different situation than that which was under discussion by the Working Group.

112. It was also observed that a regulatory change could be seen as a *force majeure* event, depending on the law applicable to the transfer contract. It was clarified that the contracts, other than *force majeure*, also usually addressed: (i) a change in law that made it impossible or impracticable for the relevant party to perform, as well as (ii) a change in circumstances, meaning instances where something happened to make the whole project commercially untenable (comparable to a hardship clause).

113. *The UNIDROIT Deputy Secretary-General* suggested including supervening circumstances as a possible topic for the Group's discussions. She noted that it might be helpful to talk about supervening circumstances in general, and then to delve into the possible differences in order to avoid going into the different categorisations applied by different legal systems to terms like *force majeure*, change of circumstances, or hardship.

114. A question was raised about providing a guarantee of compliance to the transferee. In response, it was observed that, once one moved away from the project and the first trade, it would be extremely unusual or impossible to have this, as no seller would be comfortable giving any sort of comfort around compliance, especially as the tradable instrument became highly liquid. It was further noted that normally one would look at whether the verifier had insurance to go against the verifier if a mistake was made in the verification process. However, this could be a problem, as usually such insurance was limited.

115. As to the passage of title, it was noted that it depended on the specific contract. However, it was also observed that the notion of title passing whenever the contracting parties said it passed would only work for the sale of goods because there was a specific provision in the Sale of Goods Act that said so. Such a provision would unlikely apply to VCCs, as they were not tangible. Thus, you could not take as a given that the contracting parties could dictate when title passed, because that was a very specific rule which might be unique to the sale of goods.

116. Yet, it was noted that under French and German law title passed when the contract so said, meaning this was a question that would depend on the legal system. The approach taken in the DAPL Principles was to say that things like the issue of when title passed were matters for what was referred to as "other law", meaning national law.

### Conclusions

117. *The Working Group agreed that an innocent acquisition rule, while not absolutely necessary, would be beneficial to facilitate trade and scale the market.*

118. *The Working Group agreed to further consider supervening circumstances as a topic for the Working Group's discussions.*

### ***Fungibility of Voluntary Carbon Credits***

119. *The UNIDROIT Secretary-General* moved to Section III, Part F of the Issues Paper on fungibility.

120. The Working Group observed that, while fungibility was arguably something which had been previously considered as desirable to scale the market, the market had now moved away from fungibility of all carbon credits. Instead, there were currently many different categories of projects as well as a massive spread in the price of carbon credits, which could range from a couple of US dollars all the way up to 500/600 US dollars per carbon credit. Market participants had become very discerning about the underlying project and the details of the particular VCCs that they were purchasing.

121. It was explained that what was emerging in the market was instead the creation of "pools of liquidity" or categories of VCCs that could then become interchangeable and therefore fungible. Rating agencies were entering the VCC space to grade the quality of carbon credits. The rating agencies, in a similar manner to what the ICVCM had done around the Core Carbon Principles, were labelling and rating the credits based on the view that there was a range in quality.

122. The point was raised that fungibility was an important aspect to keep in mind when discussing remedies under a contract. However, it was observed that fungibility should be differentiated from the right to substitution, which was what was addressed in the contracts and referred to the legal right to replace that intangible asset for another comparable but different asset. It was explained that if a particular project did not issue the VCCs sought by the buyer, then the contract often provided that the seller could try to deliver something of equivalence. What credits would be deemed “equivalent” for purposes of fulfilling any substitution obligation would depend on the nature of the credit that the buyer wanted to have delivered and whether something equivalent was available. The buyer normally would have the right to challenge whether the VCCs were equivalent. The parties could even try to determine in advance in the contract what might be equivalent but, it was emphasised, equivalent was different from fungible. One type of credit might be fungible with another type within a pool. However, although a purely fungible market created real liquidity, it was observed that it was unlikely to develop in the context of VCCs because people were buying the story behind the credits.

123. An analogy with currency was made and it was noted that whether currency was fungible depended on public law. It was also observed that the concept of fungibility, at least in the French system, was used not so much for a sale contract, but rather in the context of a deposit contract where the person who received that item in deposit had the right to return not the exact item, but something similar. Thus, while fungibility might be relevant to the available remedies, it should not be addressed in the Project as too closely linked with regulation and not helpful to the development of a secondary market.

#### Conclusions

124. *Participants largely agreed that fungibility was no longer considered a necessity for the trading of VCCs. It was instead observed that what was emerging in the market was the creation of “pools of liquidity” or categories of VCCs that could become interchangeable.*

125. *In the context of remedies, participants noted the need to separate fungibility from the right to substitution, which was what was addressed in the contracts and referred to the legal right to replace that intangible asset for another comparable but different asset.*

#### **Secured Transactions and Collateralisation**

126. *The UNIDROIT Secretary-General turned to the sections in the Issues Paper addressing secured transactions and insolvency. He queried whether, to the extent the VCC was in the form of a digital asset or was recorded on a distributed ledger, the definition of control used in the DAPL Principles for the perfection of security could be of guidance. He reiterated that control in the DAPL Principles was a matter of fact and not of law and was defined as having: (i) the exclusive ability to prevent others from obtaining substantially all of the benefit from the digital asset; (ii) the ability to obtain substantially all of the benefit from the digital asset; and (iii) the exclusive ability to transfer those abilities to another person. He further clarified that control, in the DAPL Principles, was factual; the individual held the public and private keys such that they could factually be the only one who could control the digital asset. Essentially, he explained, it was a concept that was a functional equivalent to possession.*

127. It was noted that, in the VCC context, the registry would only act according to the instructions of the account holder with respect to the units in that account. In response, however, it was clarified that a client’s ability to instruct the custodian of a digital asset did not define control. It was the actual ability to do something, rather than the ability to instruct someone to do something, which was relevant to factual control. If, for example, the client had entered into a custodian agreement or

a mixed agreement with a custodian, it might very well be the case that the only one in control was the custodian itself, even if the client had the ability to instruct that custodian.

128. A comparison was made to physical assets which were with a custodian (*e.g.*, a ship or warehouse). It was noted that the exclusive right to instruct the custodian in respect of the asset had to be sufficient and that the issue then became what happened in the event of insolvency. However, outside of the insolvency of the custodian itself, there was usually an arrangement whereby the custodian agreed that it would only act under the instruction of the VCC holder, and that was similar to any other physical warehousing arrangement. Yet, it was further clarified that the registries in the VCC context were unlike a custodian of securities or debt securities, who might receive or hold assets for its clients but then everything was mingled in an omnibus account.

129. The Working Group also discussed whether the fact that the registry or the Standard could cancel the VCC if, for example, it later found out that the relevant methodology had not been accurately or correctly applied, affected the notion of control over the VCC by the account holder. It was observed that the fact that the registry could withdraw or cancel that unit did not interfere with the notion of control, which was a functional one. It was stated that the UNCITRAL text on electronic commerce adopted a broader notion of control than the DAPL Principles, since the DAPL Principles also included the ability to obtain substantially all of the benefit from the digital assets. With the VCC registries, there was a situation where potentially someone could, from a substantive law point of view, withdraw that ability because it had cancelled that unit. Thus, this aspect needed to be taken into account, but the main thing was the exclusive ability to transfer control, and that would include the giving of instructions to the registry. It was further explained that, with respect to VCC registries, it was not control over an electronic token, but it was basically having exclusive possession of the credentials that allowed access to the system and the ability to communicate through the registry and convey instructions to the registry to do something.

130. Caution was urged against drawing in the concept of tokenisation of an asset, as it was attempted in the market and was not recognised for a number of reasons. The need to stay clear of control of the issuance of the VCC was reiterated, as that was not relevant for purposes of the Project and was instead a matter that related to the quality of the Standards. Rather, the focus should be on control over the unit once it was issued into an account. When one opened an account with a registry, one agreed to the general Terms of Business of that registry much in the same way as if one were opening an account at a warehouse and placing physical items into it. The general Terms of Business of different registries shared broadly the same kind of concepts, though some were better and more sophisticated than others and the registries generally recognised the need to provide more robust protection, for example around privacy now that the market was growing.

131. It was also clarified that VCC registries currently did not register a security interest that was created by way of assignment of the credit. This was compared to physical warehousing, where the physical warehouse did not want to get involved in registering security interests. It was suggested that, if one were to take security, they might go about doing it in a similar way to bearer bonds, *i.e.*, by taking control of the VCC by putting it into their own account. Taking security would have an element of local contract law and, once the legal nature of VCCs was determined, as well as the fact that there were proprietary rights, then that would facilitate taking security in the way that was appropriate according to the applicable jurisdictions. As to control, it was emphasised that if the unit was in somebody's account, then that person had control over that. A VCC holder might have given up control over the unit by way of security but that was a bilateral contract with the creditor, which was different.

132. In response to a question as to whether the holder of the account and the one who instructed the register were different entities, it was observed that one devolved by agency. If the buyer did not have an account and did not want to open one, and the seller had committed contractually to retire that credit on the buyer's behalf, at that point the seller was acting as an agent for the buyer.

In that scenario the buyer had control via the contract to instruct the seller to instruct the registry, which was no different from instructing the registry; it was still just a contractual right to perform that act.

133. As to whether in practice security interests were being created in VCCs, it was noted that, so far, the collateralisation and security that had been observed in the market was against the VCC with many investors in carbon projects asking about what they could hold as collateral in lieu of the VCC in case the project did not come through, such as land or cash. Others, however, observed that they had experienced people wanting to raise finance against their VCCs' portfolio in much the same way as was usually done with commodities.

134. It was further added that people in the market had been taking security interests in VCCs for the last decade or so but that it was becoming more of an issue now because the market was experiencing somewhat of a supply crunch and there was an increased demand for pre-payments of the VCCs to the project developers. There had been increasing discussion about how to do that, including with people purporting to take security over the proceeds related to the credits or taking control over the account in accordance with the specific agreement between the investor and the project developer. It was noted that for the most part, the Standards were not going to say who had security and would generally not even want to address ownership. The question then became whether one could have a security agreement and where one filed that security agreement, which became very much a subject of national law and the law of where the credits were generated and being transferred, as well as the location of the transferee in the transfer.

135. With respect to compliance credits, it was noted that many transactions had been observed where compliance carbon units had been used to raise funds through different types of financial structures and mechanisms such as a repo financing arrangement, which was described as effectively a spot-and-forward sale where one transferred full control and ownership over on the front leg and was a common way of financing commodities. It was also noted that, while not commonplace, some debt financing had been observed with the repayment in the carbon credits themselves, instead of a financial repayment. In those types of transactions, the investors would generally seek collateral over the credits in order to proceed.

### Conclusions

136. *The Working Group noted that VCC registries did not currently register a security interest that was created by way of assignment of the credit. Thus, it was suggested that the question then became whether one could have a security agreement and where one filed that security agreement, with that being a subject of national law and the law of where the credits were generated, where they were being transferred, and of the location of the transferee in the transfer.*

### ***Treatment in Case of Insolvency***

137. *The UNIDROIT Secretary-General turned the discussion to Section III, Part H of the Issues Paper concerning the treatment of VCCs in case of insolvency.*

138. It was observed that, if the carbon credits were conceptualised as rights against the registry, then the insolvency of the registry became important. If the registry was wound up and no one took over its functions, then by definition trading was no longer available. Likewise, to the extent that some VCCs took the Verra form, where not only was there a right against the registry, but also rights against the verifier and the project developer, if any of those entities became bankrupt, then that affected the value of the right. If the VCC holders paid the registry any amount of money to maintain the register, this might increase the likelihood that somebody might be available to take over the function of the registry. However, it was emphasised that, where the warranty issue was concerned, when the entity providing the warranty became bankrupt, that part became essentially valueless.



139. The Working Group confirmed that the VCC registries were not regulated entities. It was explained that the intention was for the registries not to own the credits; thus, if the registry became insolvent, it was desirable that the credits still existed and could be recreated elsewhere outside of that registry. However, the problem was raised with conceptualising VCCs as rights against a counterparty – the counterparty being the registry – if that registry then became insolvent. Although a new register could be created, this would give rise to a completely different VCC, since liabilities could not be transferred. Keeping in mind that the opposite of a right was a liability, it was observed that, while the right was on the part of the VCC holder, the liability was on the part of the registry. That liability could be novated, but that presupposed a rescue, which was something that could not be assumed. If there was no rescue and in the absence of a regulated registry system, if the entity were wound up, then the VCCs would be lost.

140. *The UNIDROIT Secretary-General* observed that this would not happen in a financially-regulated entity, since the supervisor would transfer both the assets and liabilities to a third party to some extent. He noted that regulation would be required in this context to scale the market and provide some certainty.

141. It was further observed that if the “thing” was just the right, and the registry became bankrupt, one either lost the credit or one was just an unsecured creditor in someone's insolvency. If, however, the “thing” was a property right, then at least in theory it could be extracted from the insolvency regime. Despite accepting that the problem was one connected with the proposed rights-based regime, doubts were expressed as to whether moving to a form-based regime would solve the issue. It was explained that if the form was maintained by a bankrupt entity, and the bankrupt entity stopped maintaining the form, then there would be instances where the entire ledger would be wiped out, unless one had a separate right against the registry to force the registry to re-create the register, which, again, would be useless if the registry were insolvent.

142. The Working Group, however, acknowledged that in a scenario in which the parties were in a jurisdiction like France, which allowed the transfer of property based on the intentions of the buyer and seller, and the buyers agreed that the property was transferred before registration, then that would not be an issue. This meant that the purported limits of the rights-based approach did not really stand because it depended on the place. In some cases, the transfer would have already occurred, and one would not need to be registered to be the owner of VCC. The registry was not a registry of title; it was perhaps more a registry of notice.

143. It was further noted that, when something specific was bought, the question then became who was taking the risk in between the purchase and the delivery. The same thing could apply to the transfer of other documents that were not documents of title such as a warehouse receipt. The issue with VCCs was that the registry was not one of title – it was where one held the unit, and this kind of system was not exactly the same anywhere else. With respect to insolvency, it was noted that all insolvency regimes provided for the rescue, no rescue, and debt routes. As to the rescue route in the context of the insolvency of a VCC registry, it was observed that, if the insolvent registry was rescued and bought, then the registry did not change, only the owners did, and this would not create any issues. As to the no rescue route, if somebody came in and asset-stripped the registry and found that they did not want that registry but were instead going to transfer everything over to a separate database keeping all the same serial numbers, this too would likely not be a problem as the units would have just been moved from one registry to another.

144. It was, however, observed that the last scenario did not really involve the moving of things, but rather the destruction and creation, regardless of whether the data had been exported or imported into the new database. It was clarified that the VCC was not data, but a right. The scenario was compared to an interbank transfer, which did not actually involve transferring money but represented the extinguishing of a debt claim against bank A and creating a debt claim against bank B. This would involve the transferring of rights and liabilities and, unless there was a regulatory

framework that allowed it, the transfer of liabilities (with the registry being the obligor) would be a problem.

145. It was observed that in the United States, to the extent that VCCs were considered commodities, they were regulated by the CFTC. So, the CFTC could hypothetically bring an enforcement action against Verra for fraud or manipulation. At the moment, the regulatory approach was light, but it was suggested that this would be something to monitor. The Group was urged to differentiate between VCCs like Verra and derivatives markets, which were much more highly regulated.

146. It was added that the possibility to transfer also depended on the contract and if the contract provided that the registry could transfer, then there should not be a problem. It was noted that this would be a pre-agreement to a novation, an interesting but likely uncommon type of clause to include since it would essentially provide an insolvency tool in the bilateral contract.

### Conclusions

147. *Participants confirmed that VCC registries were not regulated entities as in the case of the holders of securities which, when insolvent, were subject to special regulations that allowed a supervisor to come in and gain control of the situation to prevent financial issues in the market.*

148. *It was noted that conceptualising VCCs as rights against a counterparty (e.g., the registry) could be problematic if that registry became insolvent. Although a new register could be created, this would give rise to a completely different VCC, since liabilities could not be transferred. In the absence of a regulated registry system, if the entity was wound up, then the VCCs would be lost.*

### **Role of Custodians and Intermediaries**

149. *A member of the UNIDROIT Secretariat introduced Section III, Part I of the Issues Paper by noting the prior discussion on the role of registries and whether they were acting as custodians or exercising a custodial role. She inquired with the Group as to whether there were any other intermediaries not addressed in the Issues Paper that would be relevant for discussion.*

150. It was noted that the first custodian would be the project developer itself since it had back contracts with the original right holders, such as farmers or landowners, depending on the project, and it commercialised the credits on the registry and had an obligation to bring that money back to the original rights holders. The second intermediary would be a burgeoning group of carbon brokers. These could be separate brokerage firms that did not themselves have accounts with the registries but that engaged in matchmaking and took an agency fee of anywhere between 3 and 5%. The third type of intermediaries were the companies themselves who invested in carbon projects and usually had a separate account. These companies might retire some of the credits to use them towards their own net zero goals and sell some of the credits on to their consumers, again adding a fee which differed from company to company and could be anywhere from 3 to even 15%.

151. A participant clarified that the register was never a custodian because it did not keep any value on its books. The custodian would rather eventually be a broker or another intermediary and that was where the rights-based approach could become weak and problematic (if there was an intermediary holding the rights). It was further observed that if the registry was only the registry and was not holding the value, then the only insolvency that was of any relevance was the insolvency of the holder, or if someone held that to the benefit of someone else, but not of the registry itself. The insolvency of the registry might, however, have some relevance if the value of the unit was the warranty provided by the registry.

## Conclusions

152. *Issues for further discussion included whether the registries performed a custodial function and what other intermediaries would need to be addressed by the Project.*

### **Item 4: Organisation of future work**

153. *The UNIDROIT Secretary-General closed the substantive discussion and moved to the organisation of future work. He noted that the discussion had been extremely useful, noting the significant value added by participants with different expertise, such as commercial lawyers as well as experts in environmental, private, and insolvency law.*

154. *The UNIDROIT Secretary-General and the UNCITRAL representative discussed the possibility of holding the next meeting in Vienna in January 2024. The UNIDROIT Secretary-General also suggested that, in order to make progress, the discussion might be broken up into smaller subgroups made up of those who were interested in specific questions.*

155. *The UNCITRAL representative recalled that UNCITRAL had been asked to perform the aforementioned mapping exercise and UNCITRAL would be producing for the January meeting a descriptive document based on a comparative law analysis and the responses provided by the UN Member States to the UNCITRAL Questionnaire. He noted that the January meeting would focus on addressing whether such a document provided an accurate description of the options in the market and their implications.*

### **Items 5 & 6: Any other business and Closing of the session**

156. *In the absence of any other business, the UNIDROIT Secretary-General, in his role as Interim Chair, thanked all participants for their participation and invaluable contributions to the discussion, and declared the session closed.*

**ANNEXE I****ANNOTATED DRAFT AGENDA**

1. Opening of the session and welcome
2. Adoption of the agenda and organisation of the session
3. Consideration of matters identified in the Issues Paper (Study LXXXVI – W.G.1 – Doc. 2)
  - a. Preliminary matters
  - b. Scope of the future instrument
  - c. Content of the future instrument
4. Organisation of future work
5. Any other business
6. Closing of the session

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