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DRAFT UNIDROIT PRINCIPLES ON THE LEGAL NATURE OF VERIFIED CARBON CREDITS

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DRAFT UNIDROIT Principles on the Legal Nature of Verified Carbon Credits

I. INTRODUCTION

A. Reasons for the Principles

1. Carbon markets are increasingly being recognized as a pivotal mechanism to channel financial resources into initiatives combating climate change. As integral components of the climate policy architecture, these markets play a crucial role in reducing GHG emissions cost-effectively, mobilizing all important carbon finance in the case of international carbon markets and generating revenue in the case of domestic markets, and promoting the adoption of low-carbon technologies and solutions.

2. A range of carbon markets exists, spanning international and domestic levels these markets serve to:

- (a) enable governments to pursue voluntary cooperation between countries in the implementation of their nationally determined contributions (NDC) and allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity, and
- (b) incentivize and facilitate participation in the mitigation of greenhouse gas emissions by public and private entities. Private entity engagement may be through compliance frameworks or through voluntary activity to reach self-determined climate commitments.

3. There are two main types of instruments traded in carbon markets (i) government issued permits or "**Allowances**" and (ii) credits issued post independent verification that an emission reduction or removal has occurred as a result of specific project activity "**Verified Carbon Credits**" of "**VCCs**".

- 4. The core types of markets may be broadly described as follows:
 - (a) **Jurisdictional compliance markets** where covered entities must submit government issued permits or Allowances to offset their emissions e.g. the EU Emissions Trading Scheme (ETS) (there are now, at the date of writing this introduction, some [36] operational ETSs with [17] in development.
 - (b) **Jurisdictional Tax** where partial offset is permitted through the use of eligible VCCs e.g. Singapore.
 - (c) **Sectoral compliance** markets where covered entities submit eligible VCCs e.g. CORSIA.
 - (d) **International cooperative approaches** under Art 6 Paris Agreement using VCCs as the unit of measure.
 - (e) **Voluntary markets** where private entities make voluntary climate commitments including, (i) a commitment to voluntarily reduce its own emissions within their value chain outside of a compliance obligation and (ii) a commitment to voluntarily finance the reduction or removal of emissions outside of its own value chain through the purchase of VCCs.

5. It can be noted, therefore, that the market in VCCs is not just a voluntary market but a global market in VCCs that services both buyers for compliance obligations and voluntary buyers.

6. Although the importance of VCCs as a mechanism for raising finance and distributing benefits is rapidly being recognised across all parties to the Paris Agreement, the legal nature and the regulatory oversight of the market of VCCs is uncertain in many jurisdictions. Certainty on the classification of a VCC under Private Law is critical to support market participation by private entities including project developers and investors. It informs market mechanics such as: - how transfers may be completed by sale or as collateral, - the treatment of VCCs held by an entity in insolvency, and - it influences the accounting and tax treatment.

7. While in certain jurisdictions, derivatives in VCCs fall under the regulatory framework applicable to other derivatives, there is less certainty about the VCCs themselves. Derivative markets play a critical role in any market, facilitating raising capital and helping principle to principle (or Business to Business OTC "B2B") market participants manage risk. Derivatives also enhance transparency in the underlying B2B market and promote the liquidity necessary to raise finance. The derivatives markets and the underlying B2B market are co-dependent, with the derivatives market depending on the strength and integrity of the underlying B2B market, and that underlying B2B market relying on the derivatives market to promote transparency and liquidity. This is a further imperative to clarify the legal nature of the underlying VCC.

B. Typical life cycle of a VCC

8. To provide context to these Principles the key steps in the lifecycle of a VCC are broadly described below. In summary there are three stages:

- **ONE** Generation and Supply
- **TWO** Secondary Market Trading
- **THREE** Use and Retirement

9. All VCCs are issued as a consequence of activities in a project designed to reduce or remove emissions from the atmosphere. The lifecycle of a VCC has commonalities whether it is issued by a Governmental crediting program of country, the crediting program of the UN (a 6.4ER) or an Independent Carbon Crediting Program (ICCP)1 . In summary that process entails the setting of the methodology that will be used by a project proponent, the validation and registration of the project at a carbon crediting platform, the implementation of the project, the independent third-party verification that the project has achieved certain emissions reduction or removals, followed by the issuance of a VCC and the recording of it in a registry.

10. Transactions in the secondary market may then be conducted between market participants with the VCC as the underlier.

11. The last stage usually entails an instruction by the end buyer to the relevant registry operator to retire the VCC thereby removing it VCC from circulation in the market. The party retiring the unit may use proof of such retirement to fulfil a compliance obligation or to fulfil a voluntary commitment.

12. Set out below is a more detailed description of the lifecycle of a VCC to add background and context to these Principles.

¹ Examples of such ICCPs include, but are not limited to, the Verified Carbon Standard (Verra),¹ the Gold Standard,¹ the American Carbon Registry,¹ Climate Action Reserve,¹ and Puro Earth.¹

1. Generation and Supply

(a) Methodology, Validation and Registration

13. A methodology for a carbon project refers to a set of detailed boundaries, procedures and criteria used to measure, quantify, monitor, and verify the emission reductions or removals achieved by that carbon project. The crediting program that will issue the VCCs (whether a private or public entity) often both develops and determines what methodologies it will accept. Methodologies fall into two key brackets, nature-based and technology-based programs, and within each of those categories are methodologies that remove emissions and methodologies that remove or reduce emissions. Examples include: nature based removals through reforestation and technology based removals through carbon capture and sequestration and nature based reduction through reduced methane from ruminants and tech based reduction through clean energy switching. Each crediting program publishes the details of the methodologies it has already accepted. New projects may adopt an existing methodology or develop a new methodology subject to approval of the relevant crediting program.

14. The key actors at this stage are the project proponent and the project developer who may or may not be the same entity. The project proponent is the individual or entity that possesses overall control and responsibility for the project. The Project Developer often has a broader role in bringing the project to fruition, including sourcing finance and engaging with all stakeholders. Importantly the project proponent is usually the party into whose registry account the crediting program will first issue the VCC.

15. The project proponent creates a project design document (PDD) that describes all aspects of the project, including its boundaries, objectives, the methodologies, monitoring plan, and expected outcomes. The PDD also includes a baseline, "business as usual" emissions scenario that represents the level of emissions that would occur in the absence of the project. The PDD serves as the blueprint of the project and provides the basis for subsequent validation of the project and verification of the emissions reductions or removals. The project developer will also compile associated documentation including technical specifications, environmental impact assessments, financial analyses and expected environmental and social benefits.

16. The [project proponent] then seeks validation of the project by an approved third-party validation/verification body (VVB). A VVB has three main roles, (i) assess methodologies, (ii) validates projects and monitoring plans, and (iii) verifies the achievement of claimed emission reductions and removals. Validation involves an assessment of the project to determine if it conforms to the rules of the relevant crediting program and the applicable methodology and also the likelihood that the expected environmental and social benefits will be achieved. If the project passes validation, it may then be registered with the relevant crediting program. Registered projects are generally published by the crediting programs along with key documents in accordance with crediting program rules.

(b) Measurement, Reporting, and Verification (MRV)

17. Once a project is implemented it is continuously monitored, in accordance with the monitoring plan set out in the PDD. Such monitoring runs through pre-stated time periods (monitoring periods) that are appropriate to the project and methodology during which emissions reductions or removals and other social or environmental benefits are measured. Throughout the project's implementation, the [project proponent] ensures monitoring reports are generated to support the verification of the project impact by the VVB in accordance with crediting program requirements.

18. The VVB is responsible for verifying the claimed achievement of emissions reductions or removals and other project impacts as being accurate, real and in accordance with the relevant methodology and rules of the crediting program. Verification occurs periodically (verification period) which may or may not coincide with the monitoring periods. [The duration of a verification period is a practical matter relating to the methodology. For example, for a carbon capture and sequestration project linked to an energy plant such verification would be largely a desktop process done through analysis of data relating to energy production and may be done monthly, whereas verification of forestry project usually requires gathering primary data on the ground and may be done only every six months or less.] The VVB creates a verification report that confirms the achievement of the claimed emission reductions or removals. The verification report is then used as the basis for crediting program's issuance of the corresponding number of VCCs claimed in respect of that verification period.

19. This process is designated as the measurement, reporting, and verification (MRV) process.

(c) Issuance and a Registry

20. The verification report is submitted for approval to the crediting program in accordance with the relevant rules and protocols of that crediting program. Once approved the project proponent may instruct the crediting program to issue VCCs into its account at the relevant registry. The crediting program issues VCCs and the registry operator registers each VCC (or batch of VCCs) with a unique identifier in the account of the project proponent. Each VCC represents a claim to the achievement of either the verified emission reduction or removal of specific greenhouse gases (GHG) measured on a one tonne of CO_2 -equivalent basis. The equivalence is measured using a conversion factor based on the relative global warming potential of the relevant GHG, by way of example the conversion factor for methane is approximately 30, meaning the removal of 30 tonnes of methane would be equivalent to $30tCO_2e$ or 30 VCCs.

21. Registries are electronic record-keeping systems designed for the purpose of maintaining records and related documents of projects and the VCCs that have been issued in respect of those projects. Registries may or may not be owned and/or operated by the crediting program. The issues relating to registries and their operation are not covered in this report, only to note that as the market matures so does the development of registry infrastructure and management.

2. Secondary Market Trading

22. Once issued, a VCC may be disposed of by the current holder and acquired by a new holder. The transfer between parties is recorded in the in the applicable registry account(s) on instruction from the transferring party to the registry operator. Such dispositions and acquisitions may occur multiple times in a secondary market.

23. In this context there is also a primary market that refers to the original purchase of the VCCs from the project proponent through bespoke spot or forward contracts. The purchasers in the primary market are often investors that generate pre-financing for the project in return for the delivery of the issued or to-be-issued VCCs. This is critical for the functioning of the market as there is a considerable time lag (sometimes years) between project initiation and issuance of VCCs when material capital is required for development and operation of the project. The investor may be a market intermediary intending to on-sell the VCCs in a secondary market or a party wanting the VCCs for their own purpose, whether for voluntary or compliance use.

24. Buyers and sellers in the secondary market may transact bilaterally or on an exchange for spot, forward or futures delivery. There are considerable developments underway in the secondary market infrastructure with the growth in regulated exchanges offering cleared contracts and uncleared trading, some offering trading in fungible digital receipts representing the holding of VCCs

in a registry and others offering platforms for the transfer of VCCs within registries. These developments are out of scope for these Principles. Of relevance is the settlement of any transaction for delivery of VCCs is completed by account transfer.

3. Use and Retirement

25. The final stage in the lifecycle of a VCC is retirement. Retirement refers to the process of permanently removing the VCC from the circulation ensuring it cannot be transferred or transacted again. To complete retirement the holder of the VCC instructs the registry operator to retire the VCC. It is usually required to notify the registry operator whether it is retiring on its own behalf or on behalf of another party and the purpose of retirement. The registry operator then moves, tags, freezes, removes or otherwise encumbers the relevant VCC as retired, thereby removing the ability of that unit to circulate. In effect all that remains is the information relating to the VCC and what it was retired for and not the VCC itself.

26. Some parties retiring a VCC may be doing so to demonstrate a commitment to voluntarily finance the reduction or removal of emissions outside of its own value chain through the purchase of VCCs. In other instances, a party may have a compliance obligation that it may fulfil through proof of retirement of eligible VCCs. The governance and guidance on use case for VCCs is out of scope of these Principles.

4. Cancellation

27. It is possible that post issuance an event may occur that affects the effectiveness of the preissuance verification. Such event may relate to either circumstances where post issuance the verification process is found to have been or is deemed to have been incorrect; or to circumstances where post issuance the beneficial effects of the relevant project are reversed (for example a forest fire).

28. In such circumstances the rules of the relevant carbon crediting program determine the process for suspending or cancelling such VCCs. The risks associated with such cancellations are usually allocated at a transaction level and risk mitigation tools including insurance are in development.

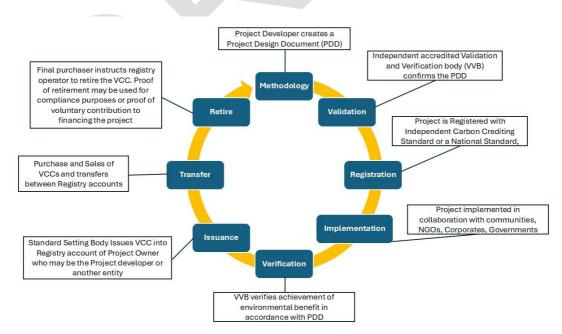


Fig (i) Life Cycle of a Verified Carbon Credit

[5. Summary

29. VCCs are each transactable units that have been "issued" by a crediting program to represent a claim to one tonne of CO₂-equivalent emissions that has been verified as removed or reduced by a registered and validated project in accordance with the applicable crediting program and methodology. Each crediting program has its own set of rules and terms of business and may be a government, the UN or a private entity. VCCs are an important tool for providing finance upstream to environmental projects. Their importance and the size of the potential market is growing as the use case for VCCs expands in compliance and sectoral schemes and private entities are increasingly incentivized to purchase VCCs to make voluntary contributions to emissions mitigation projects. To facilitate the scaling of the market in VCCs and consequently provide financing to environmental projects it is necessary to ensure the issues relating to private law are clear to enable participants in the market to have certainty around the private transactions that raise the finance. [These Principles are intended to provide guidance to market participants, their advisors (including lawyers), and the courts and others who will consider the legal effects of these transactions. In sum, these Principles aim to reduce legal uncertainty which practitioners, judges, arbitrators, legislators, and market participants would otherwise encounter in the context of transactions in VCCs and thereby to help scale the VCMs, due to the positive externalities that they bring.]]

30. Although the importance of VCCs as a mechanism for raising finance and distributing benefits is rapidly being recognised across all parties to the Paris Agreement, the legal nature and the regulatory oversight of the market of VCCs is uncertain in most jurisdictions. This uncertainty is an obstacle to scaling the finance needed to create impact. These Principles are designed to facilitate transactions in Verified Carbon Credits of the type covered by the Principles, which are defined in Principle [xx)].

31. For transactions in these types of Verified Carbon Credits to have the maximum efficiency, it is important to have clear rules that apply to the key aspects of these transactions (briefly described in Commentary [xxx]). Without predictable results, the transactions will have inherent inefficiencies and there will be greater costs and a reduction in the value of the transactions in commerce.

32. These Principles are intended to provide guidance to principals in the transactions covered by these Principles, their advisors (including lawyers), and the courts and others who will consider the legal effects of these transactions. In sum, these Principles aim to reduce legal uncertainty which practitioners, judges, arbitrators, legislators, and market participants would otherwise face in the coming years in dealing with digital assets.

33. It is recommended that States adopt legislation consistent with these Principles. This will have several benefits. It will increase the predictability of transactions involving these assets that occur in those States. In addition, as these transactions frequently involve persons in different States, the greater the consistency among States, the greater the predictability in cross-border transactions. The increased predictability should reduce the costs of these transactions, both in direct transaction costs and pricing.

II. PRINCIPLE-BY-PRINCIPLE COMMENTARY

Principle 1

Scope

These Principles address the private law relating to verified carbon credits.

Commentary

1.1 These Principles are meant to provide guidelines for States to align their private laws with best practice and international standards regarding verified carbon credits (VCCs) as defined in Principle 2. Their aim is to foster clarity and uniformity in the private law treatment of VCCs, which is crucial for providing legal certainty and scaling up both primary and secondary markets for these assets. The Principles cover only private law issues relating to VCCs, and, in particular, proprietary rights (in the broad sense as explained in [Commentary 3.1]). Thus, they specifically address VCCs where these are the object of dispositions and acquisitions, and where rights and interests in VCCs are to be asserted against third parties. These Principles may include some matters that may be characterised as regulatory law, but generally they do not cover rules that are to be enforced by public authorities, such as rules regarding whether a person must obtain a licence for engaging in activities that concern VCCs.

1.2 Moreover, these Principles only address a specific subset of private law issues related to VCCs, while intentionally leaving many others out of their scope. For example, they do not cover matters concerning intellectual property, consumer protection or similar subjects and national law on these and similar subjects remain unaffected by the Principles. Also, they do not address many issues of contract law or property law, see Principle 3(3) and Commentary 3.6 – 3.10.

Definitions

(1) VCC

Verified carbon credit (VCC) means a unit that represents the achievement of a reduction in, or removal of, one tonne of CO_2 equivalent from the atmosphere as a result of a carbon mitigation project if

- (a) The achievement of the reduction or removal [is] [has been] verified by a positive verification report
- (b) The positive verification report [is] [has been] approved, and
- (c) The unit [is] [has been] recorded in a VCC registry [using a unique identifier].
- (2) Unit

'Unit' means an individuated intangible asset.

(2bis) Unique identifier

'Unique identifier' means a number or other unique means of identification that relates to one VCC, or to a block of more than VCC if a single record in a VCC registry relates to that block.

(3) Verified

The achievement of a reduction in, or removal of, one tonne of CO_2 equivalent is verified when a verifier has carried out a verification process resulting in a positive verification [report][statement]

OR (if we want to keep the same format as the other definitions, although I prefer the first format for this one)

'Verified' means, in relation to the achievement of a reduction in, or removal of, one tonne of CO_2 equivalent, that a verifier has carried out a verification process resulting in a positive verification [report] [statement].

(4) Verification report [or statement]

'Verification report', in relation to a VCC, can be either positive or negative. A positive verification report means a statement that the reduction in, or removal of, one tonne of CO_2 equivalent represented by that VCC has been achieved as a result of the relevant carbon mitigation project in accordance with the applicable methodology. A negative verification report means a statement that the reduction in, or removal of, one tonne of CO_2 equivalent represented by that VCC has been achieved.

(5) Verifier

'Verifier' means a legal person that, in respect of a verification process, is independent of any other natural or legal person involved in the relevant carbon mitigation project. (6) Approval of a positive verification report

A positive verification report relating to a VCC is approved when a legal person, including an ICCP or a Governmental body, approves that positive verification report.

- (7) 'ICCP' means an independent carbon crediting programme.
- (8) Methodology
 - (a) 'Methodology' means a set of requirements for the implementation, measurement, monitoring, reporting and assessment of the CO2 equivalent reduction or removal [effects][achievement] of a carbon mitigation project;
 - (b) The 'applicable methodology' in relation to a carbon mitigation project means that methodology specified by the legal person mentioned in (6) above as the methodology [relating] [applying] to that carbon mitigation project
- (9) Carbon mitigation project

'Carbon mitigation project' means a project aimed at reducing the amount of CO_2 equivalent in the atmosphere or removing CO_2 equivalent from the atmosphere.

(10) Reversal

A VCC is reversed when it is permanently removed from circulation in a VCC registry when the benefits of a carbon mitigation project are lost or diminished as a result of events following its issuance.

- (11) Revocation
 - (a) A VCC is revoked when it is permanently removed from circulation in a VCC registry when it is demonstrated that the benefits of a carbon mitigation project were never achieved from the outset.
 - (b) A VCC that has been revoked is void from the outset and was never the subject of proprietary rights.
- (12) Transfer

In relation to a transfer of a VCC:

- (a) 'transfer' of a VCC means the change of a proprietary right in the VCC from a transferor to a transferee;
- (b) the term `transfer' includes the acquisition of a proprietary right in a VCC;
- (c) 'transferor' means a person that initiates a transfer of a proprietary right in the VCC
- (d) 'transferee' means a person to which a proprietary right in a VCC is transferred;
- (e) the term 'transfer' includes the grant of a security right in favour of a secured creditor, and 'transferee' includes a secured creditor.

(13) Retirement

A VCC is retired when it is permanently removed from circulation in a VCC registry on the instruction of its registered holder.

(14) Principles law

'Principles law' means any part of a State's law which implements or is consistent with these Principles.

(15) Other law

'Other law' means a State's law to the extent that it is not Principles law.

(16) Insolvency related proceeding

'Insolvency-related proceeding' means a collective judicial or administrative proceeding, including an interim proceeding, in which, for the purpose of reorganisation or liquidation, at least one of the following applies to the assets and affairs of the debtor:

- (a) they are subject to control or supervision by a court or other competent authority;
- (b) the debtor's ability to administer or dispose of them is limited by law;
- (c) the debtor's creditors' ability to enforce on them is limited by law.
- (17) Words in the singular include the plural and those in the plural include the singular.

Commentary

2.1 Generally, words defined in these Principles are defined in the singular, for ease of drafting. However, as Principle 2(18) points out, the singular includes the plural. The definitions in Principle 2 and Principles 9 and 10 are for the purposes of the Principles only and are not general definitions for any other purpose. They not only facilitate the reading of the Principles but also delineate the scope of the Principles. Each definition sets out the minimum characteristics that the defined concept, thing or person needs to have to fall within the defined word or phrase, and therefore to fall within the Principles. Each definition, but the presence or absence of these characteristics may vary, and does not affect whether the concept, thing or person falls within the relevant definition and therefore within the Principles.

<u>VCC</u>

2.2 The definition of a verified carbon credit in Principle 2(1) is designed to reflect the nature of a VCC as an intangible asset (see Principle 2(2) and Commentary 2.4) that comes into existence as a result of the process that is described in [the life cycle]. While the events leading up to the creation of a VCC are important, and in some cases, necessary precursors to the existence of that VCC, the VCC itself reifies the fact that they have taken place and that (as verified, see Principle 2(3) and (4) and Commentary 2.10) one tonne of CO_2 equivalent has thereby been removed from the atmosphere or that there has been a reduction in CO_2 equivalent from the atmosphere. The definition in Principle 2(1) lists only those facts and events that are necessary (as a matter of Principles Law) for a VCC to exist. Depending on the circumstances, a VCC may represent additional facts, and may confer private law rights, such as a transferable contractual rights against specific parties. However, because it is not always the case that a VCC represents these facts or confer these rights, they are not part of the constitutive elements in the definition for something to be a VCC within these Principles.

2.3 The definition of a VCC in Principle 2(1) includes a number of terms defined in subsequent Principles, each of which refers to an element that must be present for something to be a VCC. If something is a VCC, the Principles apply to it; it therefore can be the subject of proprietary rights (as defined broadly in Commentary 3.1), and therefore can be transferred (as defined in Principle XX), used as collateral (see Principle XXX), held in custody and so on. If something falls outside the definition, then it is not covered by the Principles, even though the term 'VCC' may be used colloquially to refer to it.

2.4 A VCC is defined as a 'unit', which is itself defined as an 'intangible asset' (Principle 2(2)) The term 'intangible asset' is familiar in many jurisdictions, [with roots tracing back to the Roman law concept of *res incorporales*] and makes it clear that a VCC is not a tangible or corporeal thing. The use of the term 'unit', which is a word used for an individual thing, makes it clear that a VCC is individuated. This individuation is one of the important characteristics of a VCC that enables it to be the subject of proprietary rights (see Commentary 3.2).

2.5 A crucial element of the definition of a VCC is that it 'represents' the achievement of a reduction in, or removal of, one tonne of CO_2 equivalent (referred to in the commentary as 'a reduction or removal') The use of the term 'represents' signifies that a VCC reifies that achievement.. This reification is a critical element of the definition of a VCC. The word 'represents' is carefully chosen and does not entail any legal conclusion that a person with a proprietary right to a VCC has a proprietary right to the underlying reduction or removal. A reduction or removal, on its own, lacks the determinacy and other attributes necessary for something to be the subject of proprietary rights in private law. It is precisely for this reason that the definition of a VCC includes additional constitutive elements beyond merely the achievement of a reduction or removal.

2.6 The first constitutive element is that the achievement of the reduction or removal is verified by a positive verification report (as defined in Principle 2(3) and (4)). This the achievement of a reduction or removal represented by a VCC is not just any achievement of a reduction or removal, but one that has undergone verification through a defined process. Moreover, the achievement of a removal or reduction represented by a VCC must have occurred as a result of a carbon mitigation project. This requirement reflects [the necessity for additionality and the] reality that the creation and sale of a VCC is one of the methods by which carbon mitigation projects can be financed. A reduction or removal that was achieved by other means would not be able to be represented by a VCC (as defined). The phrase 'carbon mitigation project' is defined in Principle 2(8).

2.7 The definition also makes it clear that the positive verification report must have been approved. Approval is defined in Principle 2(7), and is the process by which a positive verification report is approved. While approval may, [and often does] take place very shortly before or even contemporaneously with registration of a VCC, it is conceptually distinct.

2.8 Lastly, the definition makes it clear that the VCC must be recorded in a VCC registry using a unique identifier. The term 'VCC Registry' is defined in [Principle 9(1)]. Registration using a unique identifier means that a VCC has the characteristics of being identified and individuated: characteristics that are attributes that, in conjunction with other attributes, enable a VCC to be the subject of proprietary rights (Principle 3(1) and Commentary 3.2). However, as set out in Principle 2(16), the singular includes the plural in these Principles. Thus, if a specific number of VCCs in a block are given a unique serial number, that does not prevent them being individuated as long and when that block is split up into smaller blocks or individual VCCs, a unique serial number is given to each smaller block or individual VCC. This splitting can occur if, for example, a block of 100 VCCs is credited to the registry account of A, and then 50 of those VCCs are debited from A's account and credited to the registry account of B and 50 of them are debited from A's registry account and

credited to the registry account of C. This point is further clarified in Principle 2(2bis). Furthermore, as is made clear in Principle 9, a VCC is registered in a VCC Registry by crediting it to an account of a person (a 'registry accountholder' as defined in Principle 9(4), whereupon that person becomes a 'registered holder' of the VCC. Thus, the VCC is able to be controlled in the way described in Commentary 3.2, which is another attribute that enables a VCC to be the subject of proprietary rights.

<u>Unit</u>

2.9 'Unit' is defined in Principle 2(2) as an intangible asset. This may assist a jurisdiction in classifying a VCC in the manner discussed in Commentary 3.3, if a jurisdiction wishes to do this.

<u>Verified</u>

2.10 A verification process is a process carried out by a verifier (see Principle 2(5) to confirm the achievement of the stated reduction or removal has in fact occurred as a result of the Project in accordance with the methodology. As a result of the process, the verifier will produce a report that concludes either (a) that a removal of, or reduction in, one tonne of CO_2 equivalent has taken place in the course of the project (a positive verification report), or (b) that it has not (a negative verification report) The report will [typically] give reasons for this conclusion. The achievement of removal or reduction is verified if the verification report reaches the first of these conclusions and is therefore a positive verification report. It should be noted that, although this description is couched in terms of a single tonne of CO_2 equivalent, thus relating to a single VCC, a verification report can, and often does, relate to a stated number of tonnes of CO_2 equivalent.

<u>Verifier</u>

2.11 A verifier is a legal person who carries out a verification. A legal person is a person with legal personality, such as a company, but is not a natural person (a human being). While a verifier is likely to have many characteristics (such as being an expert in a particular field), only one is required by the definition for a person to be a verifier within the Principles (and therefore for a VCC (as defined) to be able to represent a removal or reduction verified by that person). This is that the verifier is independent of any other legal person involved in the relevant carbon mitigation project. This independence is such a critical part of the system relating to VCCs, that it is part of the definition of VCC, so that something representing a removal or reduction that has been verified by a non-independent verifier is not a VCC within the Principles. It is also best practice for the verifier to be accredited, by a recognised verification body, to carry out such verifications.

2.12 Principle 2(6) defines an issuer as a legal person who issues a VCC; issuance being defined in Principle 2(7).

<u>Approval</u>

2.13 _

2.14 The second constitutive element referred to in paragraph 2.5 mentioned above is that a positive verification report in relation to the relevant achievement of a reduction or removal has been approved. This approval must be by a legal person that could be, but does not have to be, an ICCP (see Principle 2(8)) or a Governmental body, which includes a national government and also a transnational institution, such as the United Nations. Such a person will only approve a verification report if it confirms, to the satisfaction of the issuer, that there has been an achievement of a removal of, or reduction in, one tonne of CO_2 equivalent in the course of the relevant carbon mitigation project.

2.15 The third constitutive element is that the VCC has been recorded in a VCC registry using a unique identifier Who actually instructs the registry to register the VCC will vary It could be the legal person who approves the positive verification report or it could be the project proponent: this does not matter as long as the instruction takes place. The person who approves the report could be the same entity that runs the registry although in these principles these two people are treated as distinct as they have very distinct functions. The instruction' could be in any form. For example, it could be an electronic conformation of a pre-programmed request or even could be by the operation of a smart contract. As mentioned above, the Principles are drafted in the singular, and refer to one single VCC, but, as mentioned in paragraph 2.8 above, it is likely in practice that a verification [report] [statement] will relate to the removal of, or reduction in, a number of tonnes of CO_2 equivalent, and therefore that a number of VCCs will be issued by one action and at the same time.

<u>ICCP</u>

2.16 The acronym ICCP is defined as 'independent carbon crediting programme'.

<u>Methodology</u>

2.17 [This Commentary is largely factual and will need to be fitted in with the life cycle text]

Carbon mitigation project

2.18 As mentioned above, it is only if the removal or reduction results from a carbon mitigation project that it can be represented by a VCC as defined in the Principles. A carbon mitigation project is described in detail in the [life cycle], and is defined broadly in Principle 2(10). [A carbon mitigation project can form part of a wider programme called a carbon mitigation programme].

<u>Reversal</u>

2.19 Similarly to revocation (Principle 2(12)) and retirement (Principle 2(14)), a reversal of a VCC results in its being permanently removed from circulation in a VCC registry. Principle 2(11) distinguishes reversal from revocation and retirement however in that reversals are the result of post-issuance events leading to a reversal of the benefits of a carbon mitigation project. The Principle deals with reversal of a VCC rather than reversals at a project level since the Principles are intended to address the proprietary nature of VCCs. As Principle 5 clarifies, a reversal at the project level may or may not lead to a reversal of issued VCCs but it is necessary for the Principles to provide for such an eventuality.

<u>Revocation</u>

2.20 Similarly to reversal (Principle 2(11)) and retirement (Principle 2(14)), a reversal of a VCC results in its being permanently removed from circulation in a VCC registry. Principle 2(12) distinguishes revocation from reversal and retirement however in that revocations are the result of events leading up to issuance, typically fraud, that lead to the issuance of VCCs that would otherwise not have been issued. Principle 6 clarifies the proprietary consequences of revocation.

<u>Transfer</u>

2.21 A transfer, as defined in Principle 2(13), means the change of a proprietary right in a VCC from one person ("a transferor") to another ("a transferee"). This concept is functional and intentionally broad, encompassing all types of proprietary rights, whether in whole or in part. It includes not only the transfer of full ownership rights, but also the transfer of limited proprietary rights such as usufruct or other partial rights recognized under national law.

2.22 In these Principles, the term 'transfer' is also used to denote the grant of a security right in favour of a secured creditor, and consequently, a 'transferee' includes a secured creditor. It is important to note that this broad use of 'transfer' is purely definitional within the context of these Principles. It does not imply that the grant of a security right necessarily constitutes a transfer of ownership or any other proprietary right under applicable national laws. This approach aligns with other international instruments, such as the Hague Securities Convention, which in Article 1(1)(h) defines 'disposition' to include both outright transfers of title and grants of security interests, whether possessory or non-possessory.

2.23 A transfer as defined here, i.e. a change of a proprietary right in a VCC, must be distinguished from a change in the registry account to which a VCC is credited. A change in the registry account to which a VCC is credited may or may not be associated with a transfer of proprietary rights. A custodian (as defined in Principle 10(3)), for instance, may have VCC credited to its registry account for the benefit of a client, but will typically not acquire 'ownership' (as defined under the applicable national law) of that VCC. Conversely, a transfer of proprietary rights may or may not be accompanied by a change of registry account to which the VCC is credited. A State's law, for instance, may provide that under certain circumstances a proprietary right (such as ownership) in a VCC may pass to another person while it remains credited to the same account. An example of this could be a court-ordered transfer of ownership in a divorce settlement, where the VCC remains in the original account but legal ownership changes.

2.24 These Principles do not exhaustively prescribe the conditions for a proprietary right in a VCC to be validly transferred to another person. [Although Principle 7(4) does require that a transferee must have obtained XXX to qualify as an innocent acquirer], these Principles do not dictate all the requirements for a valid transfer of a VCC. For instance, they do not specify whether an agreement in a particular form is required, or consideration is necessary for the transfer, or if authorization from any regulatory bodies is required for the transfer to be valid. These and other specific requirements for a valid transfer are left to other law, which may vary across jurisdictions.

2.25 The term 'transferor' is defined as 'a person that initiates a transfer' because [the person may have the power to transfer greater rights than the person has]. [Indeed, a person to whose account a VCC is credited may have no rights at all but has the power to transfer rights to an innocent acquirer]. [See Principle 7(1) and Commentary 7.1].

<u>Retirement</u>

2.26 Similarly to reversal (Principle 2(11)) and revocation (Principle 2(12)), a retirement of a VCC results in its being permanently removed from circulation in a VCC registry. Unlike reversal and revocation, however, which result in the permanent retirement of a VCC regardless of the intent of its registered holder, retirement follows from the instruction of a registered holder and thus is dependent on its intent. Again unlike reversal and revocation, retirement marks the end of the intended normal life cycle of a VCC. The registered holder of a VCC may or may not have a proprietary right in that VCC, for example, the registered holder may be acting as a custodian (see Principle 10).

Principles Law and Other Law

2.27 Under Principle 1, these Principles cover private law issues relating to VCCs. They include various rules such as the rule that a VCC can be the subject of proprietary rights, and rules concerning, transfer and custody of, and the taking of security in, VCCs. [[treatment on insolvency] maybe others...]. 'Principles Law' as defined by Principle 2(15) refers to all the rules in the Principles once they have become part of State law, whether by express implementation, or because State law is already consistent with them. Within the law of a State, all law that is not 'Principles law' as defined here is referred to in these Principles as 'other law' (see Principle 2(16)). 'Principles law' and 'other

law' as defined here together form 'the law'. Other law includes administrative rules and judicially determined law, as well as legislation.

Insolvency-related proceeding

The definition of 'insolvency-related proceeding' is not meant to provide a general definition 2.28 of insolvency proceedings but defines the concept only for the purpose of these Principles. A general definition of 'insolvency proceedings' can be found in the UNCITRAL Legislative Guide on Insolvency Law and subsequent insolvency law texts. The definition in Principle 2(17) seeks to include all forms of collective insolvency-related procedures, which may take place in court or out of court, so long as the procedure is aimed at dealing with a debtor's current or immediate financial or economic distress and some legal effect is attached to the commencement of the procedure. This definition captures the new generation of insolvency proceedings whose legal design, often labelled as 'hybrid', features characteristics of both formal in-court proceedings and out-of-court contractual collective workouts. The term 'insolvency-related proceeding', as defined in Principle 2(17), would include full in-court proceedings; proceedings the opening of which entails a limitation in the debtor's ability to manage and/or dispose of its assets outside the ordinary course of its business; and proceedings which merely trigger a temporary stay of enforcement against the debtor's assets necessary for the continuation of the business activity. Hence, unlike other legal texts such as the 2009 UNIDROIT Convention on Substantive Rules for Intermediated Securities ('Geneva securities Convention') (Article (1)(h)), a debtor would find itself in an 'insolvency-related proceeding' for the purposes of these Principles even where its assets are not subject to the control or supervision of the court or an administrative authority.

General Principles

- (1) A VCC can be the subject of proprietary rights.
- (2) Principles law takes precedence over other law to the extent that they conflict.
- (3) Except as displaced by these Principles, other law applies to all issues, including:
 - (a) whether a person has a proprietary right in a VCC;
 - (b) whether a proprietary right in a VCC has been validly transferred to another person;
 - (c) whether a security right in a VCC has been validly created;
 - (d) the rights as between a transferor and transferee of a VCC;
 - (e) the rights as between a grantor of a security right in a VCC and the secured creditor to whom the security right is granted;
 - (f) the legal consequences of third-party effectiveness of a transfer of a VCC;
 - (g) the requirements for, and legal consequences of, third-party effectiveness of a security right in a VCC.

Commentary

3.1 Principle 3(1) makes it clear that a VCC, [an intangible asset] as defined in Principle 2, is capable of being the subject of proprietary rights. All the other rules in these Principles are built on this premise. The phrase 'proprietary rights' is deliberately used in a broad sense, reflecting the functional approach of these Principles, which intend to cater for the largest variety of jurisdictions possible. 'Proprietary rights' includes both proprietary interests and rights with proprietary effects, that is, rights (or interests) that can be asserted against third parties (persons that are not necessarily contractual parties). For example, in the context of insolvency, an insolvency representative might assert a right or interest in a VCC on behalf of the insolvency estate against third parties, or a third party might assert a right or interest in a VCC against an insolvency representative. The term 'proprietary rights' is not limited to absolute rights or interests, and includes, for example, security rights.

3.2 A VCC (as defined) has attributes that make it possible for it to be the subject of proprietary rights. First, it is individuated: a VCC is registered using a unique identifier. A VCC itself is unique, and can be identified. Second, it can be controlled in that a VCC is registered by being credited to an account of a specified registry account holder (see Principle 9(4). That registry account holder (who becomes, on registration of a specific VCC, the 'registered holder' of that VCC, see Principle 9(6)) is the only person who can instruct the registry to transfer or retire that VCC. Third, a VCC is rivalrous in the sense that if one person 'has' it (i.e. controls it) another does not, and if one person 'uses' it (for example, by retiring it) another person cannot. Fourth, a VCC can be transferred from A to B by debiting A's registry account and crediting B's registry account. For these reasons, a VCC, although representing a fact (or, to put it another way, information) is susceptible to being dealt with in the same way as other types of asset which are capable of being the subject of proprietary rights.

3.3 [Whether VCCs can be the subject of proprietary rights (a legal consequence) must be distinguished from the classification of them in any particular jurisdiction. For example, in certain jurisdictions a VCC could be classified as 'property', 'a good', 'a thing' or a similar concept, but this

would depend on the applicable law in question and is left for each State to decide. [If the law of a State includes a classification of different categories of assets that can be the subject of proprietary rights, and these different categories have different consequences, it is recommended that the law of that State should specify which category or categories of assets VCCs are. That is in order that VCCs can be the subject of proprietary rights in that State. This could mean the introduction of a new category of assets, but again, this is left for each specific State to decide.]

3.4 While Principle 3(1) states that a VCC (as defined) is capable of being the subject of proprietary rights, it does not prescribe any specific requirements for the acquisition of a proprietary right in a given VCC. Whether a person has a proprietary right in a VCC is left up to 'other law', as is whether a proprietary right in a VCC has been transferred from one person to another, see Principle 3(3).

Principle 3(2)

3.5 To give the rules of these Principles full effect, Principle 3(2) provides that they should take precedence over State laws wherever they conflict. Consequently, once they have been adopted and implemented into the law of a State, these Principles (by then 'Principles law' as defined in Principle 2(15)) must take precedence over other law (as defined in Principle 2(16)).

Principle 3(3)

3.6 Principle 3(3) makes it explicit that other law (as defined in Principle 2(16)) continues to apply to VCCs. For this purpose, Principle 3(3) lists several examples of issues of property law, but also of contract law, that may continue to be addressed by a State's other law, because these Principles do not cover those issues, nor do they intend to change or derogate from that other law. The list is not intended to be exhaustive or limitative. Although Principle 2(13) defines 'transfer' (as used in these Principles) as including the grant of a security right in favour of a secured creditor, the list in Principle 3(3) refers separately to transfers and security rights. This is for clarity of exposition, and because Principle 3(3) lists matters to which other law applies.

3.7 The examples in Principle 3(3) of issues that continue to be addressed by other law, can be categorised as follows. First, Principle 3(3)(a) concerns the static situation in which it must be determined whether a person has a proprietary right in a VCC. Pursuant to Principle 3(3)(a), the requirements for a (valid) right or interest in a VCC that can be asserted against third parties continue to be a matter of other law. Therefore, and by way of example, whether, in any given factual situation, a person holds a valid right of ownership in a certain VCC, is, as a matter of principle, not regulated by these Principles.

3.8 Second, Principles 3(3)(b) and 3(3)(c) concern dynamic situations of acquisition and disposition of a VCC from the perspective of the transferor and security right provider respectively. If the question arises whether a person has validly transferred a proprietary right, or validly created a security right, in a VCC, Principles 3(3)(b) and 3(3)(c) make it clear that the requirements for a (valid) transfer or creation of a security right continue to be, as a matter of principle, a matter of other law. However, this last statement is subject to some exceptions, where these Principles provide specific rules regarding the transfer of, and third-party effectiveness of a security right in, a VCC (Principles 5 and 9).

3.9 Principles 3(3)(d) and 3(3)(e) make explicit that the relationships between a transferor and a transferee, and between a grantor of a security right and the relevant secured creditor, respectively, continue to be a matter of other law and are not, as a matter of principle, dealt with by these Principles. In some situations and some jurisdictions, these relationships are characterised as primarily contractual in nature. Principles 3(3)(d) and 3(3)(e) provide that the rights between a transferor of a VCC and the transferee, and between a grantor of a security right in a VCC and the

secured creditor, are left to be dealt with by other law, whatever the qualification of the relationships between those parties.

3.10 As explained above, Principles 3(3)(d) and 3(3)(e) concern the (contractual) relationships between a transferor and a transferee, and between a grantor of a security right and the relevant secured creditor, respectively. These provisions thus concern inter se relationships, i.e. relationships between (contracting) parties. Principles 3(3)(f) and 3(3)(g), on the other hand, concern erga omnes relationships, i.e. the relationships with third parties. Pursuant to Principles 3(3)(f) and 3(3)(g), whether a transfer and a security right, respectively, can be asserted against third parties, continues to be, as a matter of principle, a matter of other law. In some jurisdictions, the 'assertability' of a right or interest against third parties follows from the concept of 'effectiveness'. Principles 3(3)(f)and 3(3)(g) provide that, whatever the doctrinal context, the requirements for such effectiveness or assertability continue to be, as a matter of principle, a matter of other law, except where the Principles provide other rules (see Principles 7 and 11).

Creation of a VCC

- (1) A VCC comes into existence when all of the following have taken place:
 - (a) [The positive verification report referring to the VCC is approved] A unique identifier has been allocated to the VCC or a block of VCCs by a VCC Registry;
 - (b) The VCC Registry has recorded that the VCC or a block of VCCs has been credited to an account in the VCC Registry.
- (2) The registered holder of a VCC at the moment it comes into existence
 - (a) has a proprietary right in that VCC, or
 - (b) if the registered holder maintains the VCC for a client, that client has a proprietary right in that VCC.
- (3) After that moment, [subject to Principle 7] the question of whether a person has a proprietary right in a VCC is a matter for other law.

Commentary

4.1 Principle 4(1) specifies the moment at which a VCC comes into existence. While approval of the relevant positive verification report (see Principle 2(6)) is a necessary precondition of the VCC coming into existence, it does not become a VCC as defined in Principle 2(1) until it has been allocated a unique identifier and has been registered in a VCC Registry. At that point, Principle 3(1) applies and it can be the subject of proprietary rights.

4.2 In these Principles, the singular includes the plural (Principles 2(17)). This is for ease and precision of drafting. However, in most, if not all, cases, a carbon mitigation project will achieve a reduction in, or a removal of, more than one tonne of CO_2 equivalent from the atmosphere. Thus, the positive verification report will relate to more than one tonne of CO_2 equivalent, which will be represented by more than one VCC. In many cases, as mentioned in Commentary paragraph 2.8, a block of VCCs representing an achievement will be recorded as credited to one account in the VCC Registry. That block may, in some cases, be given a single unique identifier, which a view to new unique identifiers being given to smaller blocks or single VCCs if they are later split from the larger block (see Commentary paragraph 2.8). For this reason, Principle 4(1)(a) and (b) refers to a VCC or a block of VCCs. However, the rest of Principle 4 is simplified by referring merely to a single VCC, and the content applies mutatis mutandis to each and every VCC in a block.

4.3 A VCC, once it comes into existence, is a new [unit] that has not, previously, been capable of being the subject of proprietary rights. Therefore there has to be a person who is the first to have a proprietary right in the VCC. Principle 4(2) provides that that person is either the registered holder (as defined in Principle 9(6) or the person for whom the registered holder maintains the VCC (see [Principle 10]). In practice, that person is usually the project proponent (see [life cycle]), who is then able to sell the VCC and can use the price to fund its financing of the carbon mitigation project.

4.4 Principle 4(3) makes it clear that after the moment discussed in the previous paragraph, when the VCC comes into existence, the question of whether a person has, at any time, a proprietary right in a VCC is a matter for other law (see Principle 3(3)). This principle is subject to Principle 7, which set out the circumstances in which a person will take a VCC free from conflicting claims, and which is a matter of Principles law.

Cancellation of a VCC

- (1) A VCC can be cancelled wholly or in part where it no longer meets the definition of a VCC.
- (2) A cancellation is effective at the time the VCC registry updates its records even if the VCC registry still retains the record of its existence after cancellation.
- (3) Upon cancellation, a VCC ceases to be the subject of proprietary rights even if the VCC registry still retains the record of its existence after cancellation.
- (4) Although a VCC ceases to be the subject of proprietary rights after cancellation, cancellation does not affect such rights that a holder of a VCC may have against any parties (if any) that form part of the VCC.
- (5) Unless otherwise agreed, any cancellation of the benefits of a carbon mitigation project should result in a pro rata reversal of VCCs among all registered holders.
- (6) Should a VCC be [Or "is" if we go with "if"] cancellation in error, the rights and remedies of parties affected, including the possibility of the restoration of the VCC, is a matter for other law.

Commentary

5.1 Principle 5(1) provides that a VCC can be cancelled wholly or in part where it no longer meets the definition of a VCC under Principle 2. This will primarily be the case where there is a reversal of the benefits of a carbon mitigation project or programme has been compromised post-issuance so that the VCC no longer "represents the achievement of a reduction in, or removal of, one tonne of CO_2 equivalent from the atmosphere". This distinguishes cancellation from revocation (Principle 6) which deals with matters leading up to issuance. Principle 5(1) is in line with the treatment of existing intangible property such as trademarks that can be cancelled for non-use subsequent to registration. Principle 5 is essential to maintain the integrity of VCC markets as the continued existence of VCCs as subjects of proprietary rights even when they no longer meet the definition set out in Principle 2 will undermine confidence in the market.

5.2 Principle 5(2) clarifies that the time of cancellation of a VCC should this come to pass is the time when the VCC registry updates its records as such. This avoids any dispute as to when the cancellation of a VCC is effective.

5.3 Principle 5(3) provides that upon cancellation, a VCC ceases to be the subject of proprietary rights. Where any rights arise as a result of cancellation, these can be dealt with according to the laws of the relevant jurisdictions but will not be governed by these Principles save as provided in Principle 5(4).

5.4 Principle 5(4) provides that, to the extent that a VCC comprises rights against certain parties (see commentary to Principle 2), those rights survive cancellation of the VCC. Principle 5(4) ensures that the market will properly price in the difference between VCCs that carry rights against certain parties (such as a VBB) and VCCs that carry no rights whatsoever.

5.5 Principle 5(5) provides for a schema for cancellation of VCCs in the absence of agreement and/or the failure of such agreement to provide an adequate solution. Many carbon mitigation projects and programmes address reversals by keeping a buffer pool of VCCs which may be used to replace VCCs cancelled as a result of reversal. This would be an example of an agreement otherwise. Principle 5(5) is thus a default solution of last resort that ensures that the market can price in VCCs with superior post-cancellation solutions.

5.6 Principle 5(6) preserves such rights as a registered holder may have (whether against a VCC registry or a third party) where a VCC is cancelled in error. This is distinct from Principle 5(4), which preserves such rights (if any) comprised within a VCC when it is properly cancelled. The nature of such rights (if any) following wrongful cancellation will vary across different jurisdictions. Some jurisdictions may provide relieve in tort whereas others may do so in restitution. In principle, it should be open to the parties to contractually agree to a particular solution, subject to any controls on contractual limitations of liability.

Principle 5 (alternative)

Cancellation of a VCC

- (1) A VCC can be cancelled wholly or in part where it no longer meets the definition of a VCC.
- (2) Upon cancellation,
 - (a) a VCC ceases to be capable of being moved from the registry account to which it is credited to another registry account;
 - (b) A VCC cannot be retired;
 - (c) the VCC registry must not comply with any instruction given by the registered holder or a user authorised by the registered holder to move the VCC into the account of another person or to retire the VCC.
 - (d) The VCC registry longer owes the VCC's registered holder the duty set out in Principle 9(7)(c)
 - (e) the VCC registry must record that the VCC is cancelled but [may] [must] still retain a record of its existence.
- (3) A cancellation is effective at the time the VCC registry updates its records in accordance with paragraph (3)(c).
- (4) Cancellation does not affect such [personal] rights that a holder of a VCC may has against any parties (if any) that form part of the VCC.
- (5) Unless otherwise agreed, any cancellation of the benefits of a carbon mitigation project should result in a pro rata cancellation of VCCs among all registered holders.
- (6) Should a VCC be [Or "is" if we go with "if"] cancellation in error, the rights and remedies of parties affected, including the possibility of the restoration of the VCC, is a matter for other law.

Commentary

5.1 Principle 5(1) provides that a VCC can be cancelled wholly or in part where it no longer meets the definition of a VCC under Principle 2. This will primarily be the case where there is a reversal of the benefits of a carbon mitigation project or programme has been compromised post-issuance so that the VCC no longer "represents the achievement of a reduction in, or removal of, one tonne of CO_2 equivalent from the atmosphere". This distinguishes cancellation from revocation (Principle 6) which deals with matters leading up to issuance. Principle 5(1) is in line with the treatment of existing intangible property such as trademarks that can be cancelled for non-use subsequent to registration. Principle 5 is essential to maintain the integrity of VCC markets as the continued existence of VCCs as subjects of proprietary rights even when they no longer meet the definition set out in Principle 2 will undermine confidence in the market.

5.2 The meaning of cancellation in relation a VCC is explained in Principle 5(2). While the VCC continues to exist, on cancellation, it is 'frozen', that is it cannot be moved to another registry account nor can it be retired. On cancellation, the VCC registry must not move or retire the VCC, and the VCC registry's duty to do so on the instructions of the registered holder or a user authorised by the registered holder no longer applies. The VCC registry must record that the VCC is cancelled but

[may][must] keep a record of its existence. While this is a matter for the market, it is likely that the market value of a cancelled VCC would reduce very considerably, probably to zero. However, since it still exists, depending on the applicable other law, a proprietary right in it could be transferred to another person and a security right could be created in it. Where any rights arise as a result of cancellation, these can be dealt with according to the applicable law but will not be governed by these Principles save as provided in Principle 5(4).

5.3 Principle 5(3) clarifies that the time of cancellation of a VCC should this come to pass is the time when the VCC registry updates its records as such. This avoids any dispute as to when the cancellation of a VCC is effective.

5.4 Principle 5(4) provides that, to the extent that a VCC comprises personal rights against certain parties (see commentary to Principle 2), those rights survive cancellation of the VCC. Principle 5(4) ensures that the market will properly price in the difference between VCCs that carry rights against certain parties (such as a VBB) and VCCs that carry no rights whatsoever.

5.5 Principle 5(5) provides for a schema for cancellation of VCCs in the absence of agreement and/or the failure of such agreement to provide an adequate solution. Many carbon mitigation projects and programmes address cancellations by keeping a buffer pool of VCCs which may be used to replace cancelled VCCs cancelled. This would be an example of an agreement otherwise. Principle 5(5) is thus a default solution of last resort that ensures that the market can price in VCCs with superior post-cancellation solutions.

5.6 Principle 5(6) preserves such rights as a registered holder may have (whether against a VCC registry or a third party) where a VCC is cancelled in error. This is distinct from Principle 5(4), which preserves such rights (if any) comprised within a VCC when it is properly cancelled. The nature of such rights (if any) following wrongful cancellation will vary across different jurisdictions. Some jurisdictions may provide relieve in tort whereas others may do so in restitution. In principle, it should be open to the parties to contractually agree to a particular solution, subject to any controls on contractual limitations of liability.

Revocation of a VCC

- (1) A VCC can be revoked wholly or in part where it is subsequently demonstrated that it never met the definition of a VCC.
- (2) A VCC that has been revoked is void from the outset and never existed as the subject of proprietary rights.
- (3) Although a VCC was never the subject of proprietary rights once it has been revoked, revocation does not affect such rights that a holder of a VCC may have against any parties (if any) that form part of the VCC.
- (4) Should a VCC be [Or "is" if we go with "if"] revoked in error, the rights and remedies of parties affected, including the possibility of the restoration of the VCC, is a matter for other law.

Commentary

6.1 Principle 6(1) provides that a VCC can be revoked wholly or in part when it is subsequently demonstrated that it never met the definition of a VCC under Principle 2. Typically, this would be where it is subsequently shown that the benefits of a carbon mitigation project or programme were never achieved in the first place. This could be because the project or programme failed to abide by the methodology of an ICCP [or a Government?]; the verification process is shown to have been compromised; or the methodology of an ICCP [or Government?] is shown to be flawed. In each of these circumstances, the claimed benefits of a project or programme were never achieved at the outset, thus distinguishing revocation from cancellation.

6.2 Principle 6(2) provides that a VCC that has been revoked is void from the outset and was never the subject of proprietary rights. This is consistent with the effects of invalidity for other categories of intangible property, such as patents where it is subsequently demonstrated that a key element for the grant of such a property was never attained in the first place Principle 6 does not deal with the consequences of such invalidity as this would not be a matter of property but contract or restitution. For example, parties can (and often do in the case of patents) undertake the risk of a patent being invalid. In some jurisdictions, the law may also provide that a seller warrants that it has title in the subject-matter of a sale (as many common law jurisdictions do in relation to the sale of goods). However, as these are not matters relating to property, these Principles do not address them.

6.3 Principle 6(3)provides that, to the extent that a VCC comprises rights against certain parties (see commentary to Principle 2), those rights survive revocation of the VCC. Principle 6(3) ensures that the market will properly price in the difference between VCCs that carry rights against certain parties (such as a VBB) and VCCs that carry no rights whatsoever.

6.4 Principle 6(4) preserves such rights as a registered holder may have (whether against a VCC registry or a third party) where a VCC is revoked in error. The nature of such rights (if any) will vary across different jurisdictions. Some jurisdictions may provide relieve in tort whereas others may do so in restitution. In principle, it should be open to the parties to contractually agree to a particular solution, subject to any controls on contractual limitations of liability.

Principle 6 (alternative)

Revocation of a VCC

- (1) A VCC can be revoked wholly or in part where it is subsequently demonstrated that it never met the definition of a VCC.
- (2) Upon revocation,
 - (a) a VCC ceases to be capable of being moved from the registry account to which it is credited to another registry account;
 - (b) A VCC cannot be retired;
 - (c) the VCC registry must not comply with any instruction given by the registered holder or a user authorised by the registered holder to move the VCC into the account of another person or to retire the VCC.
 - (d) The VCC registry longer owes the VCC's registered holder the duty set out in Principle 9(7)(c)
 - (e) the VCC registry must record that the VCC is revoked but [may] [must] still retain a record of its existence.
- (3) Revocation does not affect such [personal] rights that a holder of a VCC may have against any parties (if any) that form part of the VCC.
- (4) Should a VCC be [Or "is" if we go with "if"] revoked in error, the rights and remedies of parties affected, including the possibility of the restoration of the VCC, is a matter for other law.

Commentary

6.1 Principle 6(1) provides that a VCC can be revoked wholly or in part when it is subsequently demonstrated that it never met the definition of a VCC under Principle 2. Typically, this would be where it is subsequently shown that the benefits of a carbon mitigation project or programme were never achieved in the first place. This could be because the project or programme failed to abide by the methodology of an ICCP [or a Government?]; the verification process is shown to have been compromised; or the methodology of an ICCP [or Government?] is shown to be flawed. In each of these circumstances, the claimed benefits of a project or programme were never achieved at the outset, thus distinguishing revocation from cancellation.

6.2 The meaning of revocation in relation a VCC is explained in Principle 6(2). While the VCC continues to exist, on revocation, it is 'frozen', that is it cannot be moved to another registry account nor can it be retired. On revocation, the VCC registry must not move or retire the VCC, and the VCC registry's duty to do so on the instructions of the registered holder or a user authorised by the registered holder no longer applies. The VCC registry must record that the VCC is revoked but [may][must] keep a record of its existence. While this is a matter for the market, it is likely that the market value of a revoked VCC would reduce very considerably, probably to zero. However, since it still exists, depending on the applicable other law, a proprietary right in it could be transferred to another person and a security right could be created in it. Where any rights arise as a result of cancellation, these can be dealt with according to the applicable law but will not be governed by these Principles save as provided in Principle 5(4). Principle 6 does not deal with the consequences of revocation as between the registered holder and other persons, such as the person from whom the registered holder bought the VCC, as this would not be a matter of property but contract or restitution. For example, parties often (in the case of patents) undertake the risk of a patent being invalid. In some jurisdictions, the law may also provide that a seller warrants that it has title in the

subject-matter of a sale (as many common law jurisdictions do in relation to the sale of goods). However, as these are not matters relating to property, these Principles do not address them.

6.3 Principle 6(3)provides that, to the extent that a VCC comprises rights against certain parties (see commentary to Principle 2), those rights survive revocation of the VCC. Principle 6(3) ensures that the market will properly price in the difference between VCCs that carry rights against certain parties (such as a VBB) and VCCs that carry no rights whatsoever.

6.4 Principle 6(4) preserves such rights as a registered holder may have (whether against a VCC registry or a third party) where a VCC is revoked in error. The nature of such rights (if any) will vary across different jurisdictions. Some jurisdictions may provide relieve in tort whereas others may do so in restitution. In principle, it should be open to the parties to contractually agree to a particular solution, subject to any controls on contractual limitations of liability.

Transfer of a VCC

- (1) Subject to paragraph 3, a person can transfer only the proprietary rights that it has in a VCC, if any, and no greater proprietary rights.
- (2) A transferee of proprietary rights in a VCC acquires all of the proprietary rights that its transferor had or had the power to transfer, except that the transferee acquires rights only to the extent of the rights that were transferred.
- (3) An innocent acquirer takes a VCC free of conflicting proprietary rights.
- (4) No rights based on a proprietary claim relating to a VCC can be successfully asserted against an innocent acquirer of that VCC.
- (5) An innocent acquirer can acquire a proprietary right in a VCC even if the transferor is acting wrongfully and has no proprietary right in the digital asset.
- (6) In order to qualify as an innocent acquirer, a transferee must:
 - (a) acquire the VCC from a transferor that is the registered holder of the VCC at the time of transfer;
 - (b) have the VCC credited to their registry account by the VCC [registry][registry operator]; and
 - (c) comply with requirements equivalent to those found in the relevant good faith acquisition and take-free rules as specified by the relevant State.
- (7) A transferee of a VCC is not an innocent acquirer if the transfer of the VCC is made by way of gift or otherwise gratuitously and is not the grant of a security right.

Commentary

Principle 7(1): nemo dat rule

7.1 Principle 7(1) embodies the fundamental principle of *nemo dat quod non habet*—no one can give what they do not have. It states the general rule that a transferor cannot convey rights in a VCC that they themselves do not have. However, nemo dat is not absolute proposition within these Principles. It is qualified under Principles 7(3) through 7(7), which introduce an exception for innocent acquisition. These provisions are designed to balance the protection of original owners with the need for transactional certainty and the facilitation of commerce in the context of global carbon markets where legal certainty is paramount.

Principle 7(2): shelter rule

7.2 Principle 7(2) embodies the shelter principle: a transferee acquires all the rights of the transferor that were transferred or that the transferor had the power to transfer. In these Principles, the inclusion of this rule clarifies that a transferee's rights are derivative of the transferor's rights. The phrase of "power to transfer" references and underscores the innocent acquisition rule articulated in Principles 7(3)–7(7). This highlights the fact that, in certain instances, a person may be able to transfer rights they do not themselves have, whether through innocent acquisition or other circumstances where the law recognizes such power. Principle 7(2) also recognizes that a transfer

may be limited in scope - the transferee acquires only those rights that the transferor intended to convey through the transfer, not necessarily all rights that the transferor could have transferred.

Principle 7(3)-(4): Innocent acquisition rule

7.3 As stated in Principle 7(1) and its Commentary, the basic rule of *nemo dat quod non habet* applies to VCCs. However, this is subject to the innocent acquisition rule set out in Principle 7(3)-(7), which serves as an exception to the general rule.

7.4 Principles 7(3) and 7(4) state that an innocent acquirer takes free of conflicting proprietary rights, and no rights based on a proprietary claim can be asserted against an innocent acquirer. Principle 7(5) makes clear that a transferee may qualify as an innocent acquirer even when acquiring a VCC from a transferor who obtained the VCC through wrongful means. Examples include cases in which the transferor obtained the VCC through fraud, breach of fiduciary duty, or unauthorized access to another person's registry account. The rule applies regardless of how the transferor obtained the VCC, provided the acquirer meets the requirements set out in Principle 7(6)-(7).

7.5 The innocent acquisition rule endows VCCs with attributes similar to those of negotiable instruments, negotiable documents of title, and negotiable certificated securities in many common law and civil law jurisdictions. This attribute enhances the transferability and liquidity of VCCs, as market participants can rely on their ability to acquire them free of unknown claims, provided they meet the requirements for an innocent acquisition.

7.6 It is recognised that the result of an innocent acquisition rule is that, in some circumstances, a person with a proprietary claim, who is the victim of wrongful activity, will not be able to assert that claim successfully against the innocent acquirer. The victim would have a claim against the wrongful actor, but that is unlikely to be effective. While this could be perceived as inequitable to the original owner, the rule embodies a deliberate policy choice favouring transactional certainty over strict protection of proprietary claims. In international voluntary carbon markets, where speed, efficiency, and trust are critical, the innocent acquisition rule provides a mechanism to reduce transactional risk and enhance market confidence. Without such a rule, potential acquirers might hesitate to participate in transactions, fearing hidden claims against VCCs, particularly in a crossborder context where legal systems vary. By prioritizing the innocent acquirer's rights, the rule creates a robust and predictable framework for VCC trading, encouraging investment and liquidity in the market.

Principle 7(6)-(7): requirements for innocent acquisition

7.7 Principle 7(6) sets out the requirements for a transferee to be an innocent acquirer. The first is that the transferee must acquire the VCC from a transferor that is the registered holder for that VCC. This requirement restricts the scope of the innocent acquisition rule by establishing a crucial qualification for the transferor - only a person who appears as the registered holder of a VCC in the relevant registry can transfer the VCC in a way that triggers innocent acquisition protection. This requirement acknowledges and reinforces the public notice function of registries and their fundamental role as authoritative sources of information in VCC trading. As a practical consequence, any person acquiring a VCC from someone who is not a registered holder must undertake appropriate due diligence to verify the transferor's authority and title to transfer.

7.8 The second requirement is that a transferee must have the VCC credited to their registry account by the VCC registry operator. This requirement serves as a critical public notice mechanism that makes the transfer visible to market participants. Moreover, this registration requirement enables the transferee to subsequently become a transferor capable of initiating another innocent acquisition. The timing of registration is particularly significant as it marks the moment when

innocent acquisition protection crystallizes. This underscores the central role of registries as the primary source of legally significant information about VCC ownership and transfers.

7.9 The third requirement is that the innocent acquirer must comply with the requirements specified by the relevant State (that is, the State whose domestic law is the applicable law). As indicated by Principle 7(6)(c), States retain flexibility in determining the precise requirements for innocent acquisition of VCCs within their jurisdiction, provided these requirements align with their existing good faith acquisition and take-free rules for other types of assets. This flexibility allows States to integrate VCC transfers into their existing legal frameworks while maintaining consistency with their treatment of other assets.

7.10 Principle 7(7) excludes gratuitous transfers from innocent acquisition protection. This exclusion reflects a long-standing principle found in many legal systems - from the innocent acquisition rules in common law jurisdictions to the *possession vaut titre* doctrine in civil law traditions - that special protection of acquirers against competing proprietary claims should be limited to those who have given value. This approach rests on two key considerations. First, the deprivation of an original owner's rights can only be justified where the acquirer has given value in exchange for the VCC - there is no policy basis for preferring a gratuitous recipient over the original owner's proprietary claim. Second, while the innocent acquisition rule aims to enhance transferability and liquidity in VCC markets by protecting parties engaged in voluntary market exchanges, these market efficiency objectives have no application to gratuitous transfers. Recipients of gifts or other gratuitous transfers must therefore rely on the general rules of transfer under Principles 7(1) and 7(2), taking only such rights as their transferor had to give.

Retirement of a VCC

- (1) The registered holder of a VCC can instruct the VCC registry to retire a VCC, whereupon the VCC registry must do so forthwith.
- (2) A VCC is retired when the VCC registry updates its records indicating its retirement as such.
- (3) Upon retirement, a VCC ceases to be the subject of proprietary rights even if the VCC registry still retains the record of its existence after its retirement.
- (4) Should a VCC be [Or "is" if we go with "if"] retired in error, the rights and remedies of parties affected, including the possibility of the restoration of the VCC, is a matter for other law.

Commentary

8.1 Principle 8(1) provides that it is the registered holder of a VCC that can instruct the VCC registry to retire a VCC. This may or may not be the beneficial owner of a VCC as a registered holder may be a custodian of the VCC for another person (see Principle 10). Principle 8(1) also provides that the VCC registry is obliged to act on such instruction in a timely manner. The Principles do not dictate any particular formality for instructions to retire a VCC as participants indicated a preference for VCCs to provide their own requirements for instructions.

8.2 Principle 8(2) specifies that the time retirement is effective is the moment that the VCC registry updates is record indicating its retirement rather than some other time, such as the time instructions for retirement are given, providing certainty to when retirement occurs.

8.3 Principle 8(3) provides that upon retirement, a VCC ceases to be the subject of proprietary rights. This follows logically from the raisons d'être of retirement, which is to permanently remove a VCC from circulation (see Principle 2(14)). Principle 8(3) clarifies that this is the case even if (as is commonly the case) a VCC registry retains the record of the VCC after its retirement.

8.4 Principle 8(4) preserves such rights as a registered holder may have (whether against a VCC registry or a third party) where a VCC is retired in error. The nature of such rights (if any) will vary across different jurisdictions. Some jurisdictions may provide relieve in tort whereas others may do so in restitution. In principle, it should be open to the parties to contractually agree to a particular solution, subject to any controls on contractual limitations of liability.

Principle 8 (alternative)

Retirement of a VCC

- (1) The registered holder of a VCC [can] [has the right to] instruct the VCC registry to retire a VCC, [for its own behalf of on behalf of another person] whereupon the VCC registry must do so forthwith.
- (2) A VCC is retired when the VCC registry updates its records indicating its retirement as such.
- (3) Upon retirement,
 - (a) a VCC ceases to be capable of being moved from the registry account to which it is credited to another registry account;
 - (b) the VCC cannot be retired again;
 - (c) the VCC registry must not comply with any instruction given by the registered holder or a user authorised by the registered holder to move the VCC into the account of another person or to retire the VCC.
 - (d) The VCC registry longer owes the VCC's registered holder the duty set out in Principle 9(7)(c).
 - (e) the VCC registry must record that the VCC is retired but [may] [must] still retain a record of its existence.
- (4) Should a VCC be [Or "is" if we go with "if"] retired in error, the rights and remedies of parties affected, including the possibility of the restoration of the VCC, is a matter for other law.

Commentary

8.1 Principle 8(1) provides that it is the registered holder of a VCC that can instruct the VCC registry to retire a VCC. This may or may not be the beneficial owner of a VCC as a registered holder may be a custodian of the VCC for another person (see Principle 10). Principle 8(1) also provides that the VCC registry is obliged to act on such instruction in a timely manner. The Principles do not dictate any particular formality for instructions to retire a VCC as participants indicated a preference for VCCs to provide their own requirements for instructions.

8.2 Principle 8(2) specifies that the time retirement is effective is the moment that the VCC registry updates is record indicating its retirement rather than some other time, such as the time instructions for retirement are given, providing certainty to when retirement occurs.

8.3 Principle 8(3) explains the meaning of 'retirement'. While the VCC continues to exist, on retirement, it is 'frozen', that is it cannot be moved to another registry account nor can it be retired again. This follows logically from the raisons d'être of retirement, which is to permanently remove a VCC from circulation (see Principle 2(14)). After retirement, the VCC registry must not move or retire the VCC, and the VCC registry's duty to do so on the instructions of the registered holder or a user authorised by the registered holder no longer applies. The VCC registry must record that the VCC is retired but [may][must] keep a record of its existence. The market value of a revoked VCC would reduce to zero, and so it is unlikely that it would be the subject of any transaction. However, since it still exists, depending on the applicable other law, a proprietary right in it could be transferred to another person and a security right could be created in it.

8.4 Principle 8(4) preserves such rights as a registered holder may have (whether against a VCC registry or a third party) where a VCC is retired in error. The nature of such rights (if any) will vary across different jurisdictions. Some jurisdictions may provide relief in tort whereas others may do so in restitution. In principle, it should be open to the parties to contractually agree to a particular solution, subject to any controls on contractual limitations of liability.

VCC Registry

- (1) 'VCC registry' means an electronic [database] operated by a registry operator in which the following information is recorded:
 - (a) The unique identifier of a VCC or a block of VCCs;
 - (b) The identifier of the person to whose account the VCC or the block of VCCs is credited.
- (2) 'Registry operator' means a legal person who operates a registry.
- (3) 'Registry account' means an account maintained by a VCC registry to which VCCs may be credited or debited.
- (4) 'Registry accountholder' means a person who has entered into a registry account agreement with the registry operator in relation to one or more accounts.
- (5) 'Registry account agreement' means the agreement governing the registry account between a registered account holder and the registrar.
- (6) 'Registered [holder]' means a registry accountholder to whose registry account a VCC is credited.
- (7) A registry operator owes the following duties to a registered holder in relation to a VCC credited to the registered holder's account:
 - (a) An obligation to comply with the [registry] rules;
 - (b) An obligation to allocate a unique identifier to the VCC (or to the block of VCCs containing that VCC) and to maintain one, and only one, registry entry in relation to that VCC;
 - (c) An obligation to comply with any instruction given by a registered holder or a user authorised by the registered holder in relation to the credited VCC, including to move the VCC into the account of another person and to retire the VCC, unless:
 - (i) the registrar is prohibited from complying with the instruction by other law, the rules of the relevant person who approved the verification report or by any agreement between the registry operator and a third party to which the registered holder is a party or has consented;
 - (ii) the registry operator is not obliged, by other law or by the registry account agreement with the registered holder, under certain circumstances, to comply with the instruction;
 - (d) [Anything further to add?]
- (8) A registry operator has no proprietary right in a VCC registered in the registry it operates.
- (9) A VCC registered in a VCC registry is not available for the satisfaction of claims of creditors of the registry operator.

- (10) If a registry operator] of a VCC registry enters into an insolvency-related proceeding, a VCC registered in that registry does not form part of that registry operator's assets available for distribution to its creditors.
- (11) A registry operator must have a Recovery and Orderly Dissolution Plan providing for preservation of all entries on the VCC registry it operates if the registry operator enters into an insolvency-related proceeding.
- (12) A an registry operator must comply with any instruction from [an ICCP] to cancel a VCC In accordance with Principle 5 or to revoke a VCC in accordance with Principle 6.
- (13) A registry operator must not permit any movement, cancellation, retirement or revocation of a VCC that is already cancelled, retired or revoked.

Commentary

9.1 [Principle 9 includes some definitions in relation to a VCC registry. These could stay in the registry principle or could be moved to Principle 2 eventually.] As discussed in [life cycle/introduction], a VCC registry is, usually, established solely under private law as opposed to a registry established by, or pursuant to, legislation. The definitions in Principle 9 are therefore quite broad and minimalistic, so that most (if not all) registries that purport to be VCC Registries are covered by the Principles. This is important since under Principle 2 (1) a unit is only a VCC within the Principles if it is registered in a VCC Registry (as defined in Principle 9).

9.2 A VCC Registry is defined in Principle 9(1) as a database recording some very minimal information, namely, the unique identifier of a VCC or a block of VCCs (see commentary 2.8) and the identifier of the person to whose account that VCC (or block of VCCs) is credited. A VCC Registry is likely to record much more information than this, but given possible variations between registries, the definition is as minimal as possible. Similarly, although it is [desirable] that a VCC registry is a public database, the definition does not include a requirement of publicity.

9.3 A registry is operated by a [legal] person called the 'registry operator' [registrar] (see Principle 9(2). This could be the same [legal] person as the person who approves the relevant positive verification report or could be a different [legal] person. The Principles take no view on this point, but treat the two different functions separately so that they apply if the functions are carried out by two different [legal] persons.

9.4 Principle 9(3) recognises that a registry will maintain accounts to which VCCs can be credited or debited. Market participants, whose relationship with the registry is governed by a contract (called , in the Principles, a registry account agreement) can have one or more accounts with a registry. A person who has entered into a registry account agreement is called a registry accountholder (see Principle 9(4)). The registry account agreement is likely to include a number of rights and obligations between the parties to it, only some of which relate to a VCC (or more than one VCC, see Commentary paragraph 9.5) credited to that account. In relation to such a VCC, the registry accountholder is called a 'registered holder' (Principle 9(6)). Whether a registered holder of a VCC has a proprietary right in that VCC is a matter 'for other law' (Principle 3(3)), with the exception of the very first registered holder who may have a proprietary right in the VCC under Principle 4(2). However, if the first registered holder is maintaining that VCC for a client, that client will have a proprietary right in the VCC under Principle 4(2) and the first registered holder will be a custodian under Principle 10.

9.5 The obligations set out in Principle 9(7) are private law obligations arising out of the registry account agreement. They are drafted, for clarity, in relation to one, single, VCC; however, the duties

apply in relation to each VCC registered in the registry and are owed to the holder of each of those VCCs. These are basic duties, and a State should not permit them to be excluded by the terms of the registry account agreement. The duty in Principle 9(7)(a) is to comply with the registry rules. The duty in Principle 9(7)(b), to allocate a unique identifier to the VCC (or to the block of VCCs containing that VCC, see Commentary 2.8) and to maintain one, and only one, registry entry in relation to that VCC, is critically important to the individuation and identification of the VCC, which in turn is an important attribute enabling the VCC to be the subject of proprietary rights (see Principle 3(1) and Commentary 3.2). The duty set out in Principle 9(3) is to comply with the instructions of a registry holder. These instructions include an instruction to move the VCC into another account (which may or may not have the effect of transferring a proprietary right in the VCC to the accountholder of the receiving account: this will depend on other law, see Principle 3(3)). The instructions also include an instruction to retire the VCC.

9.6 Principles 9(8)(9) and (10) make it clear that, in relation to VCCs registered in the registry, the registered operator has no proprietary rights and the VCCs do not form part of its insolvency estate. Principle 9 also sets out some obligations of the registry operator which are needed to enable the VCC system to work well and which are likely to be part of regulatory law. These are that the registry operator must have a Recovery and Orderly Dissolution Plan, that the registry operator must comply with an instruction to cancel a VCC and that the registry operator must not enable any retired or cancelled VCC to be transferred, retired or cancelled.

9.7 Principle 9(11) addresses the practical and legal problems that are likely to arise if a registry operator goes into an insolvency-related proceeding. In that circumstance, it is unlikely to be able to continue to provide registry services in relation to the VCCs registered into the VCC registry it operates. In other words, it will not be able to move, retire, cancel or revoke VCCs recorded in the VCC registry and, may not be able even to maintain a reliable record of the VCCs recorded on the registry. This would have a very harmful effect on the market, and swift action to provide replacement services would thus be required to restore market confidence. For the VCC market to function properly market participants will need to be reassured at all times that the registry operator has a workable and legally robust plan that can be put in place quickly on the insolvency of the registry operator.

Custody

- (1) 'Intermediary' means a person who provides services to another person in respect of a VCC.
- (2) 'Client' means a person to whom an intermediary provides services.
- (3) 'Custodian' means an intermediary who is a registered holder of a VCC and who provides services to another person pursuant to a custody agreement in respect of that VCC.
- (4) 'Sub-custodian' means a custodian who provides services to another custodian pursuant to a custody agreement in respect of that VCC.
- (5) A custodian 'maintains' a VCC for a client if:
 - (a) That custodian is the registered holder of the VCC; or
 - (b) That custodian enters into a custody agreement with a sub-custodian with respect to the VCC [in the circumstances set out in Principle 10(10)].
- (6) An agreement between an intermediary and a client is a custody agreement if:
 - (a) It relates to a VCC;
 - (b) It is entered into in the course of the intermediary's ordinary course of business; and
 - (c) The intermediary is obliged to:
 - (i) maintain the VCC for the client; and
 - (ii) instruct the [registrar][registry operator] or, in the case of subcustody, the intermediary's own custodian, to retire the VCC if instructed by the client to do so.
- (7) A VCC maintained by a custodian for a client is not available for the satisfaction of claims of creditors of the custodian.
- (8) (a) If a custodian enters into an insolvency-related proceeding, a VCC maintained by a custodian for a client does not form part of that custodian's assets available for distribution to its creditors.

(b) If a custodian maintains a VCC for a client with a sub-custodian, and the custodian enters into an insolvency-related proceeding, the rights it has against the sub-custodian in respect of that VCC do not form part of the custodian's assets available for distribution to its creditors.

- (9) A custodian owes the following duties to its client in relation to a VCC that it maintains for that client:
 - (a) the custodian is not authorised to instruct the [registry operator] [registrar] to [transfer][move] the VCC to the account of another person, [or use it for its own benefit,] except to the extent permitted by the client and by other law;

- (b) the custodian is obliged to comply with an instruction given by the client to instruct the registrar to [transfer][move] the VCC to the account of another person, unless:
 - (i) [the custodian is prohibited from complying with the instruction by other law or by any agreement between the custodian and a third party to which the client is a party or has consented;
 - (ii) the custodian is not obliged, by other law or by an agreement with the client, under certain circumstances, to comply with the instruction]
- (c) the custodian is obliged to safeguard the VCC.
- (10) Unless prohibited by the custody agreement or by other law, a custodian may maintain VCCs [of the same description] for two or more of its clients as an undivided pool.
- (11) The duties owed by a custodian to its client may include:
 - (a) the duty to keep a record of the VCC it maintains for each client;
 - (b) the duty at all times to securely and effectively maintain VCCs in accordance with the records it keeps for its clients;
 - (c) the duty to acquire VCCs promptly if this is necessary to satisfy the duty under subparagraph (b);
 - (d) the duty to separate the VCCs maintained for clients from the VCCs maintained for its own account;
- (12) Where authorised by a client or by other law, a custodian may fulfil its duties to its client under this Principle by entering into a custody agreement with a sub-custodian if the sub-custodian is bound by the duties set out in this Principle.
- (13) A VCC maintained by a custodian for a client may be subject to a security right:
 - (a) granted to that custodian by the client;
 - (b) in favour of that custodian arising by operation of other law; or
 - (c) granted to a third party by the client.
- (14) If a custodian enters into an insolvency-related proceeding, the insolvency representative must take reasonable steps
 - (a) for a VCC registered in the account of the custodian to be [transferred] [moved] to a registry account of the client or of a custodian nominated by that client;
 - (b) for any rights the custodian has against any sub-custodian in respect of a VCC maintained for the custodian's client to be [transferred][moved] to a registry account of that client or otherwise made accessible to that client, including through [transfer][moving it] to the registry account of another custodian nominated by that client.
- (15) Paragraphs 16 and 17 apply if all of the following requirements are fulfilled:
 - (a) a custodian enters into an insolvency-related proceeding;

- (b) VCCs of the same description are maintained by the custodian for two or more clients as an undivided pool; and
- (c) the quantity of VCCs held by the insolvent custodian for those clients is less than the aggregate quantity of VCCs of the same description that it is obliged to maintain for those clients ('shortfall').
- (16) [The shortfall is met first by any VCCs of the same description maintained by the custodian for itself.]
- (17) Any [remaining] shortfall shall be borne by the clients for whom the custodian maintains the VCCs as an undivided pool, in proportion to the respective quantity of VCCs of the same description that the custodian is obliged to maintain for those clients.
- (18) If a custodian maintains a VCC for a client with a sub-custodian and the subcustodian enters into an insolvency-related proceeding, the custodian must seek to cause that VCC to be registered in its own registry account or to maintain the VCC with another sub-custodian.

Commentary

10.1 The purpose of Principle 10 is to set out private law principles relevant to custody of VCCs. Other law, including regulatory law, may also apply to the provision of custody services. Custody, broadly speaking, is where a person known as a 'custodian' (usually a legal person, which may be a regulated entity), maintains a VCC on behalf of and for the benefit of another person called a 'client'. The client might be another custodian. The maintain of the VCC by the custodian is in a manner that gives the client special protection against unauthorised dispositions of the VCC and against the insolvency of the custodian who maintains the VCC. Principle 10 only applies where the person providing the custody services does so in the ordinary course of its business. The special protection for the client referred to is likely to be achieved in private law by the client having a proprietary right of some sort in the VCC, although the precise technique by which this protection is achieved will vary according to the private law of the relevant jurisdiction.

10.2 Principle 10(1) defines an intermediary as a person who provides services to another person in respect of a VCC. Whether the services provided by an intermediary are custody services will depend on whether the agreement between the intermediary and its client is a custody agreement. Principle 10(6) defines a custody agreement. Principles 10(2) to (4) define the important parties in relation to custody. To be a custodian an intermediary must be the registered holder of the relevant VCC, and must provide services to a client pursuant to a custody agreement in respect of that VCC. If the client is a custodian, the intermediary is also a sub-custodian.

10.3 Sub-custody is where the registered holder of the VCC (the sub-custodian, who is a custodian) maintains the VCC for another custodian, who, in turn, maintains it for a client (who is not a custodian). In theory, there could be a chain of sub-custodians, but there will always be a client at the bottom of the chain who is not acting as a custodian. As set out in Principle 10(5), the concept of 'maintaining' a VCC includes two situations. The first is where a custodian itself is the registered holder of a VCC and 'maintains' it for the client. The second is where a custodian thereby becoming the sub-custodian's client). Here, the sub-custodian is the registered holder of the VCC and the custodian is the sub-custodian is the sub-custodian thereby becoming the sub-custodian's client). Here, the sub-custodian is the registered holder of the VCC and the custodian has rights against the sub-custodian under the custody agreement. Where a sub-custodian is used, the sub-custodian and the custodian both 'maintain' the VCC.

10.4 Custody agreement Principle 10(6) defines a custody agreement relating to a VCC (Principle 10(6)(a) and, therefore, custody of that VCC. Sub-paragraph (b) makes it clear that to be a

custodian, the intermediary must be acting in the ordinary course of its business. Sub-paragraph (c) sets out the core duties of a custodian (see also Principle 10(9)). These are to maintain the VCC for the client (see Commentary 10.3) and to instruct the [registrar] [registry operator] to retire the VCC if the client instructs the intermediary to do so.

10.5 Principle 10(7) applies where the custodian has not entered into an insolvency-related proceeding. It makes it clear that VCCs maintained by a custodian for a client are not available for the satisfaction of the claims of the custodian's creditors. This result parallels the substance of Principle 10(8), which provides that VCCs maintained for clients are not part of the assets available for distribution to the custodian's creditors if it enters into an insolvency-related proceeding. These provisions reflect the baseline concept that such VCCs belong to the clients, not to the custodian.

10.6 Principle 10(8)(a) sets out the consequences of the insolvency of the custodian in a functional way rather than using legal concepts such as property or ownership. On the custodian's insolvency, VCCs it maintains for clients as custodian are not part of the assets available for distribution to its creditors. In Principle 10(8), the 'custodian' could in fact be a sub-custodian and the 'client' could be a custodian. Principle 10(8) sets out the consequences where a VCC is held through a sub-custodian (see Principle 10(12)). As explained in Commentary 10.3, where a custodian maintains a VCC through a sub-custodian, the custodian (who will be the client of the sub-custodian under a custody agreement) has rights against that sub-custodian under the custody agreement. If the custodian is insolvent, its rights against the sub-custodian are not part of the custodian's assets available for distribution to its creditors.

<u>Duties</u>

10.7 Principle 10(9) sets out duties which are owed by a custodian providing custody services under an agreement with a client. The duties relate to the VCC maintained by the custodian for the client. These are basic duties and a State should not permit them to be excluded by the terms of the custody agreement. If the custodian is a sub-custodian, the client is itself a custodian. The language of Principle 10(9) is intended to be functional and neutral between legal cultures. In some jurisdictions, the relationship between custodian and client will be legally characterised as a trust while in other jurisdictions it may be characterised as a contractual or other type of legal relationship.

10.8 Principle 10(10) addresses the situation where a custodian maintains VCCs 'of the same description' for several clients. The phrase 'of the same description' is used in these Principles to refer to VCCs that are treated by market participants as fungible (see also Principles 10(15) to (17)). Fungibility is not a technical characteristic of a VCC, but a matter of market practice. The record of any VCC in a registry is individualised because it is uniquely identified. [However, as a matter of market practice, many VCCs are treated as fungible so that any such VCC or VCCs will satisfy a delivery obligation in relation to a VCC.]

10.9 Subject to other law or to the custody agreement, Principle 10(10) permits a custodian to maintain VCCs for several clients as an undivided pool. This has two consequences. First, the custodian may maintain an undivided pool of client assets all of which are registered in the custodian's registry account, so that no specific VCC or quantity of VCCs is specifically allocated to a particular client. If the custodian maintains VCCs for several clients with a sub-custodian, maintaining them as an undivided pool means that the custodian need not have a separate sub-account with the sub-custodian for each client. As a result an undivided pool as described above includes all VCCs 'of that description' registered in the registry account of the custodian as well as all VCCs 'of that description' maintained with one or more sub-custodians. Second, when the custodian receives an instruction from a client in respect of a VCC maintained for its clients as an undivided pool, it may comply with that instruction using any VCC or quantity of such VCCs registered in its registry account or that it maintains with a sub-custodian. This is because these various VCCs 'of the same description' are treated as fungible, as explained above in Commentary 10.8. Where the custodian is not allowed

to maintain an undivided pool, it must implement what is often called full segregation. The reference to 'a custodian' in Principle 10(10) also applies to a sub-custodian, whose clients are custodians.

10.10 Principle 10(11) sets out private law duties which a State may wish to ensure are owed by a custodian to its client, although it is for a State to choose whether it wishes to do so, in which case it would have to make the chosen duties mandatory and non-excludable by agreement. Separately, a State may wish to impose these duties on custodians as a matter of regulatory law, that is, by imposing duties for which there is no private law redress but breach of which may incur sanctions imposed by the State. Again, it should be recalled that if the custodian is a sub-custodian, the client is a custodian. [For the result of Principle 10(8) [insolvency] to be attained under some domestic laws, the duty under Principle 10(11)(d) must not be permitted to be excluded by the terms of the custody agreement.] A State may choose to impose a similar duty as a matter of regulatory law.

10.11 Principle 10(12) makes it clear that a sub-custody structure can be used. Under this structure, the custodian maintains the VCC by entering into a custody agreement with a sub-custodian with respect to that VCC (see Principles 10(4) and (5) and Commentary [10.3]). Such a structure can be used if the sub-custodian is bound by the duties set out in Principle 10. A custodian would, however, be in breach of its own duties to the client if the chosen sub-custodian was not subject, in the sub-custody agreement, to the mandatory and non-excludable private law duties of a custodian under the applicable law. [These duties are those set out in Principle 10(9) plus those listed in Principle 10(11) that the relevant State has chosen to make mandatory.] Other law determines the extent to which, if any, a custodian is responsible to its client with regard to the non-performance by the sub-custodian of its duties under Principle 10.

10.12 Principle 10(13) recognises that a custodian may have a security right in the VCC it maintains for a client. For example, the client may owe the custodian fees, for which the custodian wishes to be secured, or the custodian may have lent the client money to acquire the VCC.

10.13 Principles 10(14) to 10(17) give guidance as to suitable rules which should (or, in the case of Principle 10(16), could) apply in relation to VCCs (or if a sub-custodian is used, rights against the sub-custodian) if a custodian enters into an insolvency-related proceeding. These rules are not comprehensive; the applicable insolvency law governs all other issues that could arise in these circumstances. It should be noted that a custodian or sub-custodian could have a security right over, or another type of right to, VCCs maintained for its clients (see Principle 10(13)). The effect of this on the actions taken by an insolvency representative would be a matter of other law.

10.14 Principle 10(14) imposes a duty on the insolvency representative to take reasonable steps so that the client can obtain the VCCs maintained for it by the custodian. If the VCCs are maintained by the custodian by entering into a custody agreement with a sub-custodian (Principle 10(5)(b)), the duty on the insolvency representative relates to the custodian's rights against the sub-custodian. The client may want the VCCs moved into its own registry account (or obtain the rights against the sub-custodian itself), or may want another custodian to maintain them on its behalf. The insolvency representative may need to take certain steps to achieve this result, such as instructing the registry to VCCs from one account to another.

10.15 Principles 10(15) to 10(17) apply where VCCs 'of the same description' (see Commentary 10.8) are maintained by a custodian for its clients as an undivided pool (see Principle 10(10) and Commentary 10.8). Undivided pools of VCCs 'of the same description' are explained in Commentary 10.9. A custodian can maintain VCCs as an undivided pool either by the VCCs being registered in the custodian's registry account or by entering into a custody agreement with a sub-custodian in respect of an undivided amount of VCCs. In this latter situation, its rights against the sub-custodian will be undivided. Principles 10(15) to 10(17) deal with the situation where there is a shortfall of VCCs, or rights against the sub-custodian, of a particular description. Principle 10(15) explains the situation of shortfall in an undivided pool, namely, that the custodian does not maintain sufficient VCCs to

meet the number of VCCs it is obliged, under the relevant custody agreements, to maintain for the clients for whom it maintains the VCCs in the undivided pool. For example, suppose a custodian had custody agreement with four clients, each relating to 100 VCCs. If the custodian only had 300 VCCs registered in its registry account, there would be a shortfall. In the insolvency-related proceeding of a custodian, there may be potentially as many shortfalls as there are undivided pools.

10.16 If there is a shortfall, a State may wish to provide that the loss is first met by any VCCs of the same description maintained by the custodian on its own account, whether these VCCs are registered in the custodian's 'house' registry account or whether the custodian uses a sub-custodian (Principle 10(16)). This approach follows that of Article 25 of the Geneva Securities Convention. However, under that Convention, a State can make a declaration that this rule is not to apply in that State. In a similar way, it is a policy decision for a State as to whether to adopt the rule set out in Principle 10(16). For this reason, Principle 10(16) is in square brackets.

10.17 Under Principle 10(17) the loss of VCCs (or rights against a sub-custodian) caused by the shortfall should be borne pari passu by all the clients for whom the custodian is obliged to maintain the VCCs of which there is a shortfall. The approach follows that of Article 26(2) of the Geneva Securities Convention. If a State chooses to adopt the rule in Principle 10(16), then the word 'remaining', which is in square brackets in Principle 10(17), applies. Otherwise, that word is not required.

10.18 Principle 10(18) sets out the consequences of the insolvency of a sub-custodian where a VCC is maintained through that sub-custodian (see Principle 10(12)). In these circumstances, the custodian must seek to move the VCC from the registry account of the insolvent sub-custodian either to its own registry account or to the account of another sub-custodian.

Security

- (1) A VCC can be the subject of security rights.
- (2) Whether and how a security right in a VCC is created is governed by other law.
- (3) A security right in a VCC can be made effective against third parties if one of the following requirements is met:
 - (a) The requirements of any method of third-party effectiveness provided by other law are fulfilled;
 - (b) The secured creditor becomes the registered holder of the VCC; or
 - (c) A custodian holds the VCC for the secured creditor [as set out in]; or
 - (d) [The secured creditor enters into a control agreement with the grantor and the custodian who holds the VCC for the grantor of the security right.]
- (4) [A control agreement is an agreement in relation to a VCC made between the grantor, the custodian who holds the VCC for the grantor and the secured creditor, which includes either or both of the following provisions:
 - (a) that the custodian is not permitted to comply with any instructions given by the grantor in relation to the VCC without the consent of the secured creditor;
 - (b) that the custodian is obliged to comply with any instructions given by the secured creditor in relation to the VCC in such circumstances and as to such matters as may be provided by the agreement, without any further consent of the grantor.]
- (5) A security right in a VCC that is made effective against third parties by one of the methods set out in paragraph 3(b)(c) [or (d)] has priority over a security right in that VCC only by a method that is not set out in paragraph 3(b), (c) [or (d)]
- (6) A security right in a VCC can be enforced by:
 - (a) Selling it and applying the net proceeds of sale in or towards the discharge of the secured obligation; or
 - (b) Appropriating the VCC as the secured creditor's own property and setting its value against, or applying its value towards the discharge of, the secured obligation, providing that the security agreement provides for realisation in this manner and specifies the basis on which the VCC is to be valued for this purpose;
 - (c) Close-out netting under a close-out netting provision;
 - (d) Any other method of enforcement under other law.
- (7) If the security right is enforced under 6(a), (b) or (c), any surplus value not required for satisfaction of the secured obligation must be transferred to a subordinate competing claimant (if any) and any balance must be remitted to the grantor.

Commentary

Insolvency