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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. DEVELOPMENT OF CARBON MARKETS

1. Carbon markets have emerged as critical tools in the global effort to mitigate climate change, driven by the objectives set forth in the Kyoto Protocol and the Paris Agreement.
2. The Kyoto Protocol, adopted in 1997, operationalized the United Nations Framework Convention on Climate Change (UNFCCC) by committing industrialized countries and economies in transition to limit and reduce greenhouse gases (GHG) emissions in accordance with agreed individual targets.
3. The Kyoto Protocol introduced three market-based mechanisms aimed at enhancing the cost-effectiveness of emissions reductions:
 - (a) Emissions Trading (ET): This allowed Parties to the Kyoto Protocol (i.e. countries) to transfer and acquire emissions reduction units resulting from projects aimed at reducing or removing emissions at source, if such units were supplemental to their domestic actions aimed at meeting their targets under the Protocol.
 - (b) Clean Development Mechanism (**CDM**): Enabled industrialized countries to invest in emission reduction projects in developing countries, earning certified emission reduction (**CER**) credits that could be used to meet their own targets.
 - (c) Joint Implementation (**JI**): Allowed industrialized countries to earn emission reduction units (**ERUs**) by investing in projects that reduce emissions in other industrialized countries.
4. These three mechanisms collectively aimed to provide flexibility in how countries met their targets under the Kyoto Protocol.
5. The Paris Agreement, adopted in 2015, expanded the scope of climate action by requiring all countries, not just industrialized countries and economies in transition, to commit to reducing emissions. The Agreement's primary goal is to limit global warming to well below 2°C above pre-industrial levels, with efforts to limit the increase to 1.5°C.
6. Under Article 6 of the Paris Agreement, new market mechanisms were introduced:
 - (a) Article 6.2: Facilitates cooperative approaches where countries can create and trade internationally transferred mitigation outcomes (ITMOs). This mechanism builds on the Kyoto Protocol's emissions trading system but with more flexibility and broader participation.
 - (b) Article 6.4: Establishes a UN centralized mechanism, similar to the CDM, where carbon credits (6.4ERs) can be generated from emission reduction activities and sold on the international market.
7. These mechanisms under the Paris Agreement aim to enhance global cooperation, ensure environmental integrity, and mobilize climate finance, paving the way for more integrated and dynamic carbon markets.
8. Together, these international frameworks have played a pivotal role in the evolution of carbon markets, transforming them into key instruments for reducing global greenhouse gas emissions and achieving long-term climate goals. The transition from the Kyoto Protocol to the Paris Agreement

reflects a shift towards more inclusive and flexible market mechanisms, designed to engage a broader range of actors and promote more ambitious climate action worldwide.

9. As part of the response to the commitments under the Kyoto Protocol some jurisdictions implemented domestic emissions trading schemes. Most notably the EU in 2005 (EU Emissions Trading Scheme or EU ETS), where primary emitters of emissions were allocated a cap on their emissions and a compliance obligation to submit allowances issued under the EU ETS to match their actual emissions. A party with a compliance obligation may reduce its emissions below its cap and sell its allowances to a party that has exceeded its compliance obligation, a so called a Cap-and-Trade mechanism. Such an emissions trading scheme is a Compliance Scheme as there is a legal obligation on covered entities to comply and submit allowances. It is a market mechanism as the allowances may be traded, with the price set by the market, incentivizing covered entities to reduce emissions to meet their own targets or pay for allowances. Other compliance schemes include the USA Regional GHG Initiative and the New Zealand ETS and the Kazakhstan ETS. There are currently 36 compliance schemes in force globally and a further 20 approximately under development or consideration¹. Each ETS is covered by its own rules defining what sectors are covered and what is eligible for submission under that scheme to meet the compliance obligation.

10. Under the EU ETS, for example, allowances are issued by the governing body (EU Allowances or EUAs) into the market in a closed registry and may then be traded and submitted for compliance purposes. The EU ETS during its early phases, also allowed a certain amount of a covered entities' compliance obligation to be satisfied with the submission of CERs or ERUs, these were issued as a result of project activities that either remove or reduce emissions (as defined above). Thus, for compliance purposes an entity could submit EU Allowances, that are in effect permits issued by the ETS governing body and also project based emissions units CERs or ERUs. In the current phase the EU ETS does not allow any project based units to be submitted for compliance purposes but this matter is constantly under review.

11. Alongside the compliance market a market developed where entities (mostly corporates) desired to voluntarily fund project-based emissions reductions or removals. Independent **crediting programs** developed to meet this need creating frameworks for project methodologies and quality standards for the issuance of units relating to a verified reduction or removal of emissions. This market is the so-called voluntary carbon market (VCM).

12. As noted above some compliance schemes permit certain project-based units to enter that scheme and be used for compliance purposes. The eligibility criteria for entry is determined by that scheme. Of note is that across carbon markets there are two primary types of units, (1) Allowances or permits of a kind issued by a governing body, and (2) project-based units that have been issued post- verification to record that the project has achieved the stated emissions reduction or removal as a Verified Carbon Credit (VCC). [VCCs include CERs issued under the CDM mechanism, 6.4 ERs and also units issued by **independent crediting programs**. ERUs under the Kyoto Protocol JI scheme are no longer in circulation.]

13. In addition to the regional emissions trading schemes there is also CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation) a global market-based measure developed by the International Civil Aviation Organization (ICAO) to help the aviation industry manage its carbon emissions. Under the scheme Airlines must submit eligible carbon credits to meet their emissions in respect of certain flights. It is estimated that the 15 largest airlines represent approximately 300 million tonnes of emissions a year². There are no allowances or permits issued into this market and only Verified Carbon Credits issued under specified crediting programs are eligible for submission.

¹ International Carbon Action Partnership.

² To be added.

14. With the onset of increased incentives (regulatory or CSR) for corporates to set their own emissions reduction targets, the implementation of CORSIA and the increase in scope and number of compliance schemes accepting VCCs, the market for VCCs has rapidly grown. Where previously the market was niche, with only a small number of voluntary buyers and a limited compliance use, now estimates are that the market could reach a value of \$50billion to \$100billion by 2028³. With that growth has arisen the requirement to ensure the global marketplace operates with integrity, on the supply side and on the demand side, but also to ensure the issues of private law are clear to enable the market to thrive and drive necessary finance towards projects that reduce or remove emissions.

15. At this juncture in the relatively new market in VCCs, there are issues of Private Law that are uncertain. Of paramount importance for providing certainty around transactions between individuals and organizations is the legal nature of VCCs. The definition of the legal nature of a VCC informs (inter alia) the ability to transfer title under contract, issues of property in an estate and the ability to take and give security. Certainty around these issues is required to enable the market to grow. These issues are separate from those of Public Law, which in this context, relate to the oversight of the market by governmental bodies and their regulators. For clarification by example, the CFTC regulates the US market in commodity-based financial instruments including derivatives based on VCCs.

16. All VCCs are issued as a consequence of activities in a project designed to avoid, 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 (a CER) the crediting program of the UN (a 6.4ER) or a private crediting program⁴. 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 running 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] [followed by the issuance of a VCC into a registry]. Transactions in the market may then be conducted with the VCC as the underlier ending with the eventual retirement of the VCC where an environmental claim is being made, thereby removing the VCC from circulation in the market. The party retiring the unit [typically] [usually] does so for compliance purposes or to 'make a statement' either that they have contributed to the relevant emissions reduction or removal in the host country of the project or that they have offset their own emissions. These principles are concerned with, and limited to, the legal nature of a VCC post issuance and do not consider other issues relating to VCCs including: rights associated with the project, the efficacy of the methodologies, integrity of any use case of a VCC, and market infrastructure and participants. It also does not consider the appropriate use case for a VCC in respect of what claim may be made by the party retiring the VCC. The issues associated with integrity of the projects and supply of VCCs and the integrity of claims being made are being addressed by various organizations associated with the market, both public and private.

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

B. TYPICAL LIFE CYCLE OF A VCC

1. The Methodology, Validation and Registration

18. 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

³ To be added.

⁴ Examples of such ICCPs include, but are not limited to, the Verified Carbon Standard (Verra),⁴ the Gold Standard,⁴ the American Carbon Registry,⁴ Climate Action Reserve,⁴ and Puro Earth.⁴

by a 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 avoid 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.

19. 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 project⁵. 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.

20. 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. This is the concept of additionality. 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.

21. Each project must be registered with a crediting program. To achieve registration the project must be validated 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 as a project by the relevant crediting program. Registered projects are generally published by the crediting programs along with key documents in accordance with crediting program rules.

2. Monitoring and Verification

22. Once the project is running it must be continuously monitored, according to the monitoring plan set out in the PDD, to ensure it is running in conformance with the statements in the PDD and associated documents. Such monitoring runs through pre-stated time periods (monitoring periods) established by the crediting program that are appropriate to the project and methodology during which emissions reductions or removals and other social or environmental benefits are monitored. Throughout the project’s implementation, the project developer ensures monitoring reports are periodically generated to support the verification of the project impact by the VVB in accordance with crediting program requirements.

23. 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)

⁵ UNIDROIT Summary Report WG1, para. 19.

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.

24. This process is designated as the measurement, reporting, and verification (MRV) process. All projects must undergo the MRV process and demonstrate both environmental and financial additionality. Environmental additionality is the measure of greenhouse gases (GHG) removed or reduced against the baseline in addition to those that would have occurred in a "business-as-usual" scenario. As an example, if a coal fired power plant were ready for decommissioning, then the decommissioning would not be environmentally additional. Financial additionality refers to the principle that a project would not be economically feasible without the revenue from the sale of carbon credits.

3. Issuance and a Registry

25. The verification report is submitted to the crediting program in accordance with the relevant rules and protocols of that crediting program. The crediting program notifies the project proponent in accordance with the relevant rules and protocols of that crediting program that the verification report has been accepted. The project proponent may now instruct the crediting program to issue credits into its account at the relevant registry. The crediting program issues VCCs and the registry operator registers each VCC with a unique identifier in the account of the project proponent. Each VCC represents a claim to the achievement of the verified emission reductions or removals of specific greenhouse gases (GHG) measured on a one tonne of CO₂-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 30tCO₂e or 30 VCCs.

26. 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.

4. Transactions and Trading

27. 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.

28. 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.

29. Buyers and sellers in the secondary market may transact bilaterally or on an exchange for spot, forward or physically-settled 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 physical 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 physical delivery of VCCs is completed by the seller instructing the registry where it holds the VCCs in its account to transfer the sold VCCs to the account of the buyer.

5. Retirement

30. To use a VCC for compliance under a scheme, for example CORSIA or an emissions trading scheme where the VCC is eligible for submission, the party with the compliance obligation must prove the VCC has been retired by the registry operator. Retirement refers to the process of permanently removing the VCC from the market ensuring it cannot be held or transferred again. To complete retirement the holder of the VCC instructs the registry operator to retire the VCC. It can 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 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.

31. As noted above a party may have bought VCCs not for the purpose of fulfilling a compliance obligation but for entirely voluntarily carbon management purposes. [The sale and purchase of VCCs for voluntary purposes is termed a voluntary carbon market.] The voluntary buyer may instruct the registry operator to retire a VCC, thereby removing it from circulation preventing any compliance buyer using the VCC and also preventing any other voluntary buyer acquiring the VCC. Typically, a voluntary buyer retires a VCC so that it may lay claim to the relevant environmental and social benefits recorded by that VCC. [In some instances the party retiring the VCC may be able to make a claim that it is offsetting its own emissions footprint or the footprint of emission along its value chain, or it may make a claim to have contributed to the environmental and social benefits of the relevant host country of the project.] The governance and guidance on what claims may be made in respect of a voluntary retirement of a VCC is in development and efficacy of any such claim is out of scope of these Principles.

6. Suspension, Revocation, and Reversal

32. Suspension is used to describe a temporary measure when post issuance the VCC is frozen and may not be transferred or retired. Revocation is a permanent measure, post issuance, to remove the VCC from circulation and prevent retirement for a compliance or voluntary purpose. Suspension or revocation may be done by the relevant crediting program in accordance with its own rules and regulations, it may take such measure where for example, the crediting program (i) believes that the VCC holder has failed to comply with the applicable rules of the crediting program; (ii) believes that the VCC was issued following fraud, misrepresentation or illegality i.e. that the verification was incorrect; or (iii) withdraws approval of the project or methodology. If a VCC is suspended and the issues are then resolved and the compliance is restored, the suspension will be lifted and VCC will be resumed. Such suspension or revocation is not common.

33. Reversal may arise where after issuance of a VCC an event has occurred resulting in the GHGs that have already been verified relating to that VCC escape back into the environment. Reversal is linked to the physical nature of the underlying project and may occur due to natural disasters, project failure or other unexpected events. The illustrative example is a VCC issued in respect of forest that subsequently burns down, or GHG that has been stored in a reservoir leaks.

34. The risk of reversal varies according to the type of methodology. Crediting programs may address this tail risk in different ways and in accordance with their own rules. In some instances, the crediting program reserves a number of unissued credits in a buffer pool that may be used to replenish the VCCs relating to the reversed GHG reduction or removal, in other instances the VCC may be removed with the associated risks being born by the holder of the VCC or the party that retired the VCC at the time of reversal. Insurance and processes relating to the risks associated with reversals are in development and may vary from one crediting program to another and in respect of one methodology to another.

7. Summary

35. 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 (currently CORSIA) and voluntary buyers are increasingly incentivized to purchase VCCs to make voluntary claims in respect of the environmental and social benefits associated with the VCC. 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.]

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 .

Principle 2

Definitions

(1) VCC

Verified carbon credit (VCC) means a unit that

- (a) represents a verified reduction in, or removal of, one tonne of CO₂ equivalent as a result of a carbon mitigation project;**
- (b) has been issued [by an issuer]**
- (c) has been [registered] [recorded] in a VCC registry using a unique identifier.**

(2) Unit

'Unit' means an [individuated] intangible asset.

(3) Verified

A reduction in, or removal of, one tonne of CO₂ equivalent is verified when a verifier has carried out a verification process resulting in a verification report.

(4) Verification report

'Verification report', in relation to a VCC, means a statement that states that the reduction in, or removal of, one tonne of CO₂ equivalent represented by that VCC has taken place as a result] of the relevant carbon mitigation project in accordance with the applicable methodology.

(5) Verifier

'Verifier' means a legal person that

- (a) [is accredited [by a recognised international accreditation standard] to carry out verifications,] and,**
- (b) in respect of a verification process, is independent of any other person or legal person involved in the relevant carbon mitigation project.**

(6) Issuer

'Issuer' means a legal person, including an ICCP or a Governmental body, that issues a VCC.

(7) Issuance of a VCC

A VCC is issued when

- (a) the issuer [publicly] [accepts] [ratifies] the verification report] relating to the VCC;**
- (b) The relevant [registry operator] [registrar] is instructed to record the VCC in the VCC registry mentioned in paragraph 1(c).**

(8) ICCP

'ICCP' means an independent carbon crediting programme.

(9) Methodology

- (a) 'Methodology' means a set of requirements for the implementation, measurement, monitoring, reporting and assessment of the CO₂ equivalent reduction or removal effects of a carbon mitigation project;**
- (b) The 'applicable methodology' in relation to a carbon mitigation project means that methodology specified by the issuer as the methodology to that carbon mitigation project.**

(10) Carbon mitigation project

'Carbon mitigation project' means a project aimed at reducing the amount of CO₂ equivalent in the atmosphere or removing CO₂ equivalent from the atmosphere.

(11) 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.

(12) 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.**

(13) 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.**

(14) Retirement

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

(15) Principles law

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

(16) Other law

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

(17) 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.**

(18) 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 not only facilitate the reading of the Principles but also delineate the scope of the Principles. Each definition sets out the minimum 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 defined concept, thing or person is likely to have many characteristics other those set out in the 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.

VCC

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 CO₂ equivalent has thereby been removed from the atmosphere or that there has been a reduction in CO₂ 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'. 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 verified reduction in, or removal of, one tonne of CO₂ equivalent ('a reduction or removal). The use of the term 'represents' signifies that a VCC reifies a reduction or removal. 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 occurrence of a reduction or removal.

2.6 The inclusion of the word 'verified', which is defined in Principle 2(3), is also fundamental to the definition of 'VCC'. It specifies that the reduction or removal represented by a VCC is not just any reduction or removal, but one that has undergone verification through a defined process. Moreover, the reduction or removal 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 issuance and sale of a VCC is one of the methods by which carbon mitigation projects can be financed. A reduction or removal that took place 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(10).

2.7 The definition also makes it clear that a VCC must be issued. Issuance (by an issuer) is defined in Principle 2(7), and is the process by which the verification of the removal or reduction is accepted by the issuer and the registry is instructed to register the VCC. While issuance 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 registered 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). 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.

Unit

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.

Verified

2.10 A verification process is a process carried out by a verifier (see Principle 2(5) to confirm 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 CO₂ equivalent has taken place in the course of the project, or (b) that it has not. The report will [typically] give reasons for this conclusion. A removal or reduction is verified if the verification report reaches the first of these conclusions.

Verifier

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 two are 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). The first is that the verifier is accredited. The second 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.

Issuer

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

Issuance

2.13 As mentioned above, issuance, as defined in Principle 2(7), is the process whereby a VCC is issued. The process consists of the [public] acceptance by the issuer of a verification report, and the instruction that the VCC be registered in a VCC registry. An issuer will only accept a verification if it confirms, to the satisfaction of the issuer, that there has been a removal of, or reduction in, one tonne of CO₂ equivalent in the course of the relevant carbon mitigation project. Who actually instructs the registry to register the VCC will vary. It could be the issuer, [or it could be the project proponent] [see the life cycle: I am assuming that the PP will be explained in the life cycle]: this does not matter as long as the instruction takes place. 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 it is likely in practice that a verification [report] [statement] will relate to the removal of, or reduction in, a number of tonnes of CO₂ equivalent, and therefore that a number of VCCs will be issued by one action and at the same time.

ICCP

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

Methodology

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

Carbon mitigation project

2.16 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].

Reversal

2.17 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.

Revocation

2.18 Similarly to reversal (Principle 2(11)) and retirement (Principle 2(14)), a revocation 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.

Transfer

2.19 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.

2.20 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.

2.21 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.

2.22 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.

2.23 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].

Retirement

2.24 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

2.25 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

2.26 The definition of ‘insolvency-related proceeding’ is not meant to provide a general definition 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.

Principle 3

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 (ie 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, and therefore should itself be capable of being the subject of propriety 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).

Principle 4

Creation of a VCC

- (1) A VCC comes into existence when all of the following have taken place:**
 - (a) The VCC has been issued;**
 - (b) A unique identifier has been allocated to the VCC by a VCC Registry;**
 - (c) The VCC Registry has recorded that the VCC 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 issuance (see Principle 2(7)) 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. It 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.

4.2 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.

Principle 5

Reversal of a VCC

- (1) The record of a VCC [Or should this simply be “A VCC”] can be reversed wholly or in part where the carbon mitigation project or programme which led to its creation is compromised so that the amount of CO₂ that has been verified as having been removed or reduced is diminished by events following its issue.**
- (2) A reversal is effective at the time the VCC registry updates its records to indicate it has been reversed even if the VCC registry still retains the record of its existence after reversal.**
- (3) Upon reversal, a VCC ceases to be the subject of proprietary rights even if the VCC registry still retains the record of its existence after reversal.**
- (4) Unless otherwise agreed, any reversal of the benefits of a carbon mitigation project should result in a pro rata reversal of VCCs among all registered holders.**
- (5) Should a VCC be [Or “is” if we go with “if”] reversed 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 reversed wholly or in part where there is a reversal of the benefits of a carbon mitigation project or programme has been compromised post-issuance. This distinguishes reversal from revocation (Principle 6) which deals with matters leading up to issuance.

5.2 Principle 5(2) clarifies that the time of reversal 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 a reversal of a VCC is effective.

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

5.4 Principle 5(4) provides for a schema for reversals 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 are drawn down before any project or programme level reversal affects issued VCCs. This would be an example of an agreement otherwise.

5.5 Principle 5(5) preserves such rights as a registered holder may have (whether against a VCC registry or a third party) where a VCC is reversed 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

Revocation of a VCC

- (1) A VCC can be revoked wholly or in part where it is subsequently demonstrated that:**
 - (a) the carbon mitigation project or programme had failed to abide by the methodology of an ICCP [or a Government?];**
 - (b) the verifier’s verification process is shown to have been compromised; or**
 - (c) the methodology of an ICCP [of a Government?] is shown to be flawed.**
- (2) A VCC that has been revoked is void from the outset and never existed as the subject of proprietary rights.**
- (3) 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 in three circumstances that demonstrate that the benefits of a carbon mitigation project or programme were never achieved in the first place. These are (a) where the project or programme failed to abide by the methodology of an ICCP [or a Government?]; (b) where the verification process is shown to have been compromised; or (c) where the methodology of an ICCP [or Government?] is shown to be flawed. [Are there any other circumstances that need to be included in Principle 6(1)?] In each of these circumstances, the claimed benefits of a project or programme were never achieved at the outset, thus distinguishing revocation from reversal.

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. 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) 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 7

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) In order to qualify as an innocent acquirer, a transferee must:**
- (a) be a registered holder;**
 - (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.]**
- [(5) No rights based on a proprietary claim relating to a VCC can be successfully asserted against an innocent acquirer of that VCC.]**
- [(6) 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

7.1 Principle 7(1) states the familiar rule of *nemo dat quod non habet*—no one can give what one does not have. [Principle 7(1) is subject to the innocent acquisition rule in paragraph 3, which operates as an exception to the consequences of the application of the *nemo dat* rule]. [The effect of paragraph 3 is not that the transferor has the rights to transfer more proprietary rights than it itself has, but that it has the power to do this. Thus, an innocent acquirer takes free of conflicting proprietary rights, and that no rights based on a proprietary claim can be asserted against an innocent acquirer.]

7.2 Principle 7(2) states the shelter principle: a transferee acquires all the rights of the transferor that were transferred or that the transferor had the power to transfer. [Principle 7(2) makes an exception for the situation in which a transferor transfers less than all of its rights in the digital asset, in which case the transferee acquires only the rights that were transferred.]

Principle 8

Retirement of a VCC

- (1) The registered holder of a VCC can instruct the VCC registry [in writing? or other formality? or none?] 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 currently leaves it open as to whether baseline rules should be provided as to whether the instructions should comply with some basic formalities. Formalities, such as writing, can serve important evidentiary functions should disputes arise subsequently as to whether instructions were given or not.]

8.2 Principle 8(2) specifies that the time retirement is effective is the moment that the VCC registry updates its 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 *raison 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 9

VCC Registry

- (1) 'VCC registry' means an electronic [database] operated by a [registry operator] [registrar] in which the following information is recorded:**
 - (a) The unique identifier of a VCC;**
 - (b) The identifier of the person to whose account the VCC is credited.**
- (2) '[Registry operator] [Registrar]' 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] [registrar] 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] [registrar] 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 and the rules of the relevant issuer;**
 - (b) An obligation to allocate a unique identifier to VCC and to maintain one, and only one, registry entry in relation to that uniquely identified VCC;**
 - (c) An obligation to comply with any instruction given by a registered holder in relation to the credited VCC, including to [transfer][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 [ICCP][issuer] or by any agreement between the registrar and a third party to which the registered holder is a party or has consented;**
 - (ii) the [registry operator][registrar] 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] [registrar] has no proprietary right in a VCC registered in the registry it operates.**
- (9) A VCC registered in a registry is not available for the satisfaction of claims of creditors of the [registry operator] [registrar].**
- (10) If a [registry operator] [registrar] of a registry enters into an insolvency-related proceeding, a VCC registered in that registry does not form part of that**

[registry operator] [registrar]’s assets available for distribution to its creditors.

- (11) A [registry operator] [registrar] must have a Recovery and Orderly Dissolution Plan providing for preservation of all entries on the registry if the [registry operator] [registrar] enters into an insolvency-related proceeding.**
- (12) A [registry operator] [registrar] must comply with any instruction from [an issuer] [an ICCP] to cancel a VCC.**
- (13) A [registry operator] [registrar] must [prohibit][not permit][not carry out] any transfer, retirement or revocation of a VCC that is already 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 and the identifier of the person to whose account that VCC 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. 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 issuer of the VCC 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.

9.3 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. However, the only obligations that are set out in Principle 9 ((Principle 9(7)) are those that relate to a VCC credited to the account of a registry accountholder. 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, the client will have a proprietary right in the VCC under Principle 4(2).

9.4 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 rules of the issuer as regards registration. [if we want to include this duty we need to explain why it is important]. The duty in Principle 9(7)(b), to allocate a unique identifier to the VCC and to maintain one, and only one, registry entry in relation to that uniquely identified 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.

9.5 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.

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Principle 10

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 sub-custody, 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) 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 sub-custodian 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 'maintains' a VCC by entering into a custody agreement with a sub-custodian (the 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.

Duties

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.

Principle 11

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

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Principle 12

Insolvency

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