

<b>Titre</b>	Projet conjoint HCCH-UNIDROIT sur les actifs numériques et les jetons : Rapport
<b>Document</b>	Doc. préл. No 3 de janvier 2024
<b>Auteur</b>	BP
<b>Point de l'ordre du jour</b>	Point II.3
<b>Mandat(s)</b>	C&D No 18 du CAGP de 2023
<b>Objectif</b>	Rendre compte de l'état d'avancement des travaux exploratoires sur la portée du Projet conjoint sur les actifs numériques et les jetons
<b>Mesure à prendre</b>	Pour décision <input checked="" type="checkbox"/> Pour approbation <input type="checkbox"/> Pour discussion <input type="checkbox"/> Pour action / achèvement <input type="checkbox"/> Pour information <input checked="" type="checkbox"/>
<b>Annexes</b>	Annexe I : Rapport de la réunion de lancement et Liste des participants (La Haye (Pays-Bas), le 12 juin 2023) ( <i>en anglais uniquement</i> ) Annexe II : Document de cadrage révisé Annexe III : Rapport de la deuxième réunion et Liste des participants (Rome (Italie), du 2 au 4 octobre 2023) ( <i>en anglais uniquement</i> )
<b>Document(s) connexes(s)</b>	- <a href="#">Doc. préл. No 3C de janvier 2023</a> – Proposition de travail conjoint : Projet HCCH-UNIDROIT sur la loi applicable aux détentions et transferts transfrontières d'actifs numériques et de jetons

## Table des matières

I.	Introduction .....	1
II.	Réunions du Projet conjoint sur les actifs numériques et les jetons.....	2
A.	Réunion de lancement, le 12 juin 2023 .....	2
B.	Deuxième réunion, du 2 au 4 octobre 2023 .....	2
III.	Résultats de l'étude exploratoire : Suggestions de conclusions pour d'éventuels travaux futurs ...	3
IV.	Correspondance et consultations postérieure à la deuxième réunion.....	3
A.	Déclaration présentée par la France .....	3
B.	Consultations suite à la soumission de la prise de position de la France .....	5
C.	Réponse d'UNIDROIT et consultations ultérieures.....	5
V.	Proposition soumise au CAGP .....	6
	Annexe I : Rapport de la réunion de lancement et Liste des participants (La Haye (Pays-Bas), le 12 juin 2023) .....	10
	Annexe II Document de cadrage révisé.....	20
	Annexe III Rapport de la deuxième réunion et Liste des participants (Rome (Italie), du 2 au 4 octobre 2023) .....	31

# Projet conjoint HCCH-UNIDROIT sur les actifs numériques et les jetons : Rapport

## I. Introduction

- 1 Le présent Document préliminaire est un rapport concernant le Projet conjoint entrepris par le Bureau Permanent (BP) et le Secrétariat de l’Institut international pour l’unification du droit privé (UNIDROIT) sur le Projet HCCH-UNIDROIT sur les actifs numériques et les jetons (Projet conjoint).
- 2 Le Projet conjoint visait à s’appuyer « de manière générale, sur les travaux réalisés par le [Groupe de travail d’UNIDROIT sur les actifs numériques et le droit privé] et de les approfondir, en se concentrant sur le Principe 5 du projet de Principes d’UNIDROIT [sur les actifs numériques et le droit privé et d’examiner] l’opportunité de disposer d’une orientation coordonnée et la possibilité d’élaborer un cadre normatif sur la loi applicable à la détention et aux transferts transfrontières d’actifs numériques et de jetons, couvrant les aspects pertinents de droit privé. »<sup>1</sup>
- 3 Dans sa Conclusion et Décision (C&D) No 18 de mars 2023, le Conseil sur les affaires générales et la politique (CAGP) « s’est félicité de la collaboration qui s’est instauré entre le BP et le Secrétariat d’UNIDROIT sur les questions relatives aux actifs numériques. Le CAGP a enjoint au BP d’examiner, conjointement avec le Secrétariat d’UNIDROIT et à la lumière des travaux déjà réalisés à UNIDROIT ainsi que des décisions qui pourraient être prises par le Conseil de direction d’UNIDROIT, l’opportunité de disposer d’une orientation coordonnée et la possibilité d’élaborer un cadre normatif sur la loi applicable aux détentions et transferts transfrontières d’actifs numériques et de jetons, couvrant les aspects pertinents de droit privé, par le biais du projet HCCH-UNIDROIT sur les actifs numériques et les jetons. Le BP rendra compte des résultats de ce projet au CAGP lors de sa réunion de 2024 et formulera entre autres des propositions sur l’opportunité et la possibilité de poursuivre les travaux sur cette question par la mise sur pied d’un Groupe d’experts conjoint. »<sup>2</sup>
- 4 Ainsi, en raison du caractère novateur et technique de ces travaux, le BP a lancé une invitation le 28 mars 2023 à l’intention des Membres de la HCCH, les encourageant à désigner des experts susceptibles d’être consultés dans le cadre du Projet conjoint, notamment sur des questions techniques, les développements nationaux et la portée de l’étude<sup>3</sup>.
- 5 Lors de sa réunion du 10 au 12 mai 2023, le Conseil de direction d’UNIDROIT a approuvé les Principes d’UNIDROIT sur les actifs numériques et le droit privé (Principes d’UNIDROIT) et a « accueilli favorablement la proposition de mener des travaux conjoints avec la Conférence de La Haye de droit international privé (HCCH) sur un projet relatif à la loi applicable aux détentions et transferts transfrontières d’actifs numériques et de jetons. Le Conseil a approuvé le lancement de travaux préparatoires et exploratoires conjoints dans ce domaine, selon le format nécessaire pour présenter – si cela est jugé possible et souhaitable – une proposition complète à la prochaine session du Conseil de Direction. »<sup>4</sup>
- 6 Conformément à ses méthodes de travail, le Secrétariat d’UNIDROIT a sélectionné des experts pour participer au Projet conjoint au nom d’UNIDROIT.

---

<sup>1</sup> « Proposition de travail conjoint : Projet HCCH-UNIDROIT sur la loi applicable aux détentions et transferts transfrontières d’actifs numériques et de jetons », Doc. prél. No 3C de janvier 2023 à l’attention du CAGP de 2023, para. 17, disponible sur le site web de la HCCH, à l’adresse [www.hcch.net](http://www.hcch.net), sous les rubriques « Gouvernance » puis « Conseil sur les affaires générales et la politique » et « Archives (2000-2023) ».

<sup>2</sup> C&D du CAGP de 2023, disponibles sur le site web de la HCCH, à l’adresse [www.hcch.net](http://www.hcch.net) (voir chemin d’accès indiqué à la note 1).

<sup>3</sup> Circulaire ciblée No 22(23) du 28 mars 2023.

<sup>4</sup> [Conclusions sommaires](#), Conseil de Direction, UNIDROIT, C.D.(102) Misc. 2, mai 2023, para. 13.

## II. Réunions du Projet conjoint sur les actifs numériques et les jetons

### A. Réunion de lancement, le 12 juin 2023

- 7 Le 12 juin 2023, des experts désignés par les Membres de la HCCH et le Secrétariat d'UNIDROIT se sont rassemblés à l'occasion de la réunion de lancement qui s'est déroulée dans les locaux du BP à La Haye (Pays-Bas), avec la possibilité d'y participer à distance.
- 8 Préalablement à cette réunion, le BP et le Secrétariat d'UNIDROIT ont diffusé un projet de Document de cadrage présentant une liste de questions susceptibles d'être pertinentes pour la phase d'étude exploratoire du Projet conjoint. Ce projet a servi de base de discussion lors de la réunion de lancement, avec l'intention d'intégrer les résultats de la discussion dans une version révisée du projet de Document de cadrage. L'ordre du jour de la réunion comprenait également une discussion sur les mandats et les méthodes de travail de la HCCH et d'UNIDROIT, ainsi qu'une présentation par UNIDROIT de l'historique du Projet d'UNIDROIT sur les actifs numériques et le droit privé et des Principes d'UNIDROIT, en particulier le Principe 5 (intitulé « Loi applicable »).
- 9 À la suite des discussions menées lors de la réunion de lancement, le BP et le Secrétariat d'UNIDROIT ont procédé à la révision et à la diffusion d'un Document de cadrage. Les experts désignés pour le Projet conjoint ont été invités à formuler des réponses à une ou plusieurs questions du Document de cadrage, avec l'objectif de clarifier la portée d'éventuelles futures orientations normatives concernant les actifs numériques et les jetons, d'ici le 25 août 2023. Les réponses au Document de cadrage ont été compilées conjointement par le BP et le Secrétariat d'UNIDROIT, puis distribuées aux experts désignés pour le Projet conjoint avant la deuxième réunion en octobre 2023.
- 10 Le rapport de la réunion de lancement et la liste des participants figurent à l'annexe I. Le Document de cadrage révisé est inclus en annexe II.

### B. Deuxième réunion, du 2 au 4 octobre 2023

- 11 Du 2 au 4 octobre 2023, des experts désignés par les Membres de la HCCH et le Secrétariat d'UNIDROIT, ainsi que des membres du Groupe de travail d'UNIDROIT sur les actifs numériques et le droit privé (Groupe de travail d'UNIDROIT<sup>5</sup>) invités par le Secrétariat d'UNIDROIT, se sont réunis dans les locaux du Secrétariat d'UNIDROIT à Rome (Italie), avec la possibilité d'y participer à distance.
- 12 Au cours de cette réunion, les experts ont examiné les réponses au Document de cadrage révisé afin d'identifier les sujets les plus pertinents pour la poursuite de l'étude dans le cadre du Projet conjoint. Sur la base des discussions menées lors de la deuxième réunion, le Président a proposé la diffusion, à la clôture de la deuxième réunion, de suggestions de conclusions sommaires pour d'éventuels travaux futurs, en tant que résultat de l'étude exploratoire mandatée par les organes directeurs des deux Organisations dans le cadre du Projet conjoint. Le rapport de la réunion de lancement a également été adopté lors de la deuxième réunion.
- 13 Le rapport de la deuxième réunion et la liste des participants figurent à l'annexe III.

---

<sup>5</sup> Le Groupe de travail d'UNIDROIT a achevé ses travaux sur les Principes d'UNIDROIT avec l'adoption des Principes d'UNIDROIT par le Conseil de Direction d'UNIDROIT en mai 2023.

### **III. Résultats de l'étude exploratoire : Suggestions de conclusions pour d'éventuels travaux futurs**

- 14 Le 16 octobre 2023, le BP et le Secrétariat d'UNIDROIT ont diffusé conjointement des conclusions sommaires pour d'éventuels travaux futurs, sur la base des discussions menées au cours de la deuxième réunion.
- 15 Les conclusions sommaires font état de ce qui suit :
- a. les « actifs liés » ont été identifiés comme le principal domaine de travail, avec un consensus sur la possibilité de mener des travaux sur les « actifs liés », qui n'ont pas été définis ou pris en compte dans les Principes 4 et 5 des Principes d'UNIDROIT. Il a été reconnu comme essentiel de travailler sur des facteurs de rattachement appropriés pour identifier la loi applicable à la détermination de l'existence d'un lien valide entre l'actif numérique et l'actif auquel il est censé être lié, ainsi que sur la nature juridique du lien, le cas échéant.
  - b. Concernant les « aspects contractuels », des travaux pourraient être envisagés, bien que de nombreux aspects contractuels soient régis par les législations internes en vigueur et les règles de droit commun de choix de loi. Ainsi, tout travail futur devrait clairement identifier les frontières entre les questions de propriété et les questions contractuelles, en définissant les domaines nécessitant un « examen basé sur les transactions ».
  - c. La question de savoir si les règles relatives à la garde énoncées dans le Principe 5(3) des Principes d'UNIDROIT pourraient s'appliquer à des situations autres que la garde a reçu un large soutien.
  - d. Un examen restreint des travaux sur la loi applicable aux délits de propriété et aux délits faisant l'objet d'une action contractuelle semblerait justifié. Toutefois, l'étude sur les délits de manière plus générale, ainsi que sur les questions de responsabilité générale ou de dommages corporels, devrait être exclu de ce travail.
  - e. Il serait approprié de considérer des travaux sur des facteurs de rattachement additionnels pour les actifs numériques, y compris une évaluation de l'applicabilité de divers éléments et facteurs, à l'instar du lieu de contrôle, même dans un environnement public sans autorisation (c.-à-d., une décentralisation complète).
  - f. Les experts ont examiné différentes options pour la forme du résultat du projet, notamment l'opportunité et la possibilité d'élaborer un instrument juridique non contraignant par opposition à un instrument juridique contraignant.
  - g. Tout instrument futur se limiterait aux questions de droit privé et ne porterait pas sur le droit réglementaire, et ne pourrait pas supplanter les normes obligatoires de l'État du for.
  - h. Il serait judicieux de formuler des définitions plus précises de la notion d'« actif numérique », en fournissant des caractéristiques et des exemples clés pour englober les différents types d'objets susceptibles d'apparaître dans les travaux futurs. Il conviendrait également de considérer la nécessité de réviser les définitions si les travaux futurs progressent vers l'examen d'objets ne relevant pas de la définition générale de la notion d'« actif numérique » telle qu'elle figure dans les Principes d'UNIDROIT.

### **IV. Correspondance et consultations postérieures à la deuxième réunion**

#### **A. Déclaration présentée par la France**

- 16 Le 8 novembre 2023, la France a transmis aux Secrétaires généraux de la HCCH et d'UNIDROIT une déclaration exposant la prise de position concertée des experts du ministère français de la

Justice, du ministère français des Finances et de l'Autorité des marchés financiers<sup>6</sup>. Cette déclaration de la France a été élaborée en cohérence avec les points soulevés lors de la deuxième réunion par la délégation composée des experts français désignés par la France, ainsi que d'experts invités par UNIDROIT (y compris des membres du Groupe de travail d'UNIDROIT). La déclaration soumise par la France fait suite à une lettre antérieure du Comité juridique de Paris Europlace, datée du 20 octobre 2023, adressée au Secrétaire général d'UNIDROIT<sup>7</sup>, soulevant des préoccupations concernant les Principes d'UNIDROIT. Une copie de cette lettre a été reçue par le BP.

- 17 La déclaration exposant la prise de position soumise par la France, bien qu'indiquant qu'une « règle internationale de conflit de lois sur les actifs numériques pourrait être potentiellement pertinente à première vue » [traduction du BP], affirme que « l'introduction d'une telle règle de conflit de lois semble prématûrée. À ce stade, nous ne constatons pas de nécessité urgente pour une règle uniforme de conflit de lois telle que prévue par le Principe 5 d'UNIDROIT » [traduction du BP]. Cette prise de position met en lumière les différents problèmes de fond que la France identifie dans la règle telle qu'elle est résumée dans le Principe 5 des Principes d'UNIDROIT. Parmi ces questions, la France soulève les préoccupations suivantes :
- a. il est à noter « un risque important lié à l'instauration d'une règle de conflit qui pourrait conduire à la primauté de la loi d'un État ne fournissant pas de cadre réglementaire spécifique pour les actifs numériques... cela pourrait entraîner une situation où les émetteurs d'actifs numériques ou les intermédiaires détenant des actifs numériques pour des clients pourraient choisir cette loi au détriment des investisseurs (arbitrage réglementaire), surtout lorsque ces lois entrent en conflit direct avec les exigences réglementaires locales » [traduction du BP] ;
  - b. « une définition largement formulée de la notion d'“actif numérique” dans les Principes d'UNIDROIT, définie comme un “enregistrement électronique susceptible d'être contrôlé”, risque de traiter uniformément une diversité d'actifs sans tenir compte de leurs caractéristiques intrinsèques différentes. Les Principes d'UNIDROIT incluent notamment les crypto-actifs, les MNBC de gros et les titres détenus sur une chaîne de blocs... cette approche semble diverger de celle adoptée dans la législation européenne » [traduction du BP] ;
  - c. « la perspective offerte par les Principes d'UNIDROIT d'un traitement juridique autonome des actifs numériques par rapport au traitement juridique actuel de l'actif sous-jacent par le droit interne pourrait introduire des éléments d'incohérence et de confusion dans le système juridique existant, en contradiction avec le principe de neutralité technologique » [traduction du BP] ;
  - d. « la règle de l'autonomie des parties du Principe 5 ne semble pas être conforme à l'approche standard du droit européen sur ces questions, et nous émettons une objection substantielle contre l'application de l'autonomie des parties dans le domaine des droits de propriété » [traduction du BP].
- 18 La déclaration exposant la prise de position poursuit en indiquant que la France « reconnaît que ni les définitions énoncées dans les Principes d'UNIDROIT, ni la solution adoptée dans le Principe 5 de ces Principes ne peuvent être contestées à ce stade du projet. En conséquence, le Projet HCCH-

<sup>6</sup> Lettre de Catherine Raynouard (Directrice adjointe, Direction des affaires civiles et du sceau, Ministère de la Justice), Armel Castets (Direction Générale du Trésor, Service du Financement de l'économie, Sous-direction Financement des entreprises et marché financier, Ministère de l'Économie, des Finances et de la Souveraineté industrielle et numérique), Maxence Delorme (Directeur des affaires juridiques, Autorité des marchés financiers), adressée au Secrétaire général de la HCCH et au Secrétaire général d'UNIDROIT, en date du 8 novembre 2023, dans les archives du BP (« déclaration exposant la prise de position»).

<sup>7</sup> Lettre de Michel Prada (Président du Comité juridique, Paris Europlace), adressée au Secrétaire général d'UNIDROIT, en date du 20 octobre 2023, dans les archives du BP.

UNIDROIT semble offrir peu de possibilités pour la poursuite des négociations et à des commentaires de fond. »<sup>8</sup>

- 19 Elle recommande que « s'il reste une marge de négociation, nous suggérons que les règles suivantes soient envisagées : 1) l'adoption de définitions plus précises des actifs numériques ; 2) la limitation de la portée de la règle de conflit de lois aux actifs numériques qui ne peuvent pas être clairement liés à des catégories juridiques traditionnelles et bien établies, pour lesquelles des règles de conflit de lois existent déjà ; 3) l'utilisation de facteurs de rattachement objectifs excluant l'autonomie des parties afin de garantir l'application des lois et règlements d'un État dans lequel les actifs numériques sont clairement définis et encadrés, et 4) le recours à des facteurs spécifiques pour prendre en compte l'hétérogénéité de la catégorie des actifs numériques » [traduction du BP].
- 20 Cette déclaration soumise par la France a été partagée avec l'ensemble des experts désignés dans le cadre du Projet conjoint, ainsi qu'avec les experts invités par UNIDROIT à participer à la deuxième réunion.

### B. Consultations suite à la soumission de la prise de position de la France

- 21 Suite à la déclaration exposant la prise de position soumise par la France, des consultations ont été organisées par le BP avec les Membres de la HCCH, incluant la France, ainsi qu'avec d'autres observateurs concernés.
- 22 À la suite de ces consultations avec la France, le BP comprend que la France estime qu'il pourrait être souhaitable et possible d'entreprendre des travaux exploratoires portant sur certaines questions de droit international privé liées aux actifs numériques ou aux jetons. Cela inclurait des considérations sur la loi applicable au lien entre les jetons numériques et les objets réels, ainsi qu'une étude plus approfondie des facteurs de rattachement, à condition que toute considération de droit international privé soit conforme aux règles impératives prépondérantes de la législation interne. Cependant, la France insiste sur la nécessité non négociable de rouvrir la discussion, voire de réviser les définitions, en particulier le Principe 5 des Principes d'UNIDROIT, si de tels travaux devaient s'inscrire dans le cadre du Projet conjoint.
- 23 Après consultation avec d'autres Membres de la HCCH, le BP se montre favorable à des travaux exploratoires sur des questions de droit international privé dans le domaine des jetons. Cela engloberait la loi applicable aux jetons numériques dans la finance décentralisée et la tokenisation d'objets réels dans la chaîne d'approvisionnement mondiale, ainsi que la loi applicable aux liens établis entre les jetons numériques et les objets réels. Il a également été suggéré qu'une étude exploratoire des facteurs de rattachement, basée sur des applications et des cas d'utilisation dans le domaine des jetons, serait opportune et souhaitable.
- 24 Le BP a en outre consulté le Secrétariat d'UNIDROIT qui lui a indiqué qu'aucune réouverture ou révision des définitions et du Principe 5 des Principes d'UNIDROIT n'était envisagée dans le cadre des travaux du Projet conjoint.

### C. Réponse d'UNIDROIT et consultations ultérieures

- 25 Le 12 décembre 2023, le Secrétaire général d'UNIDROIT a répondu à la déclaration exposant la prise de position du 8 novembre soumise par la France.
- 26 Suite à cette réponse d'UNIDROIT, le BP a organisé des consultations avec les Membres de la HCCH participant au Projet conjoint pour examiner les points soulevés dans la déclaration exposant la

---

<sup>8</sup> [Traduction du BP] Voir *infra*, para. 24 ; à la lumière de la déclaration exposant la prise de position, le BP a consulté le Secrétariat d'UNIDROIT.

prise de position du 8 novembre 2023 et la lettre du 12 décembre 2023 du Secrétaire général d'UNIDROIT. Le BP constate que plusieurs autres Membres de la HCCH partagent les préoccupations exprimées par la France. Par conséquent, il semble peu probable qu'un consensus émerge parmi les Membres de la HCCH en faveur de la poursuite des travaux dans le cadre du Projet conjoint.

- 27 Sur la base de ces consultations, le BP recommande de mettre un terme au Projet conjoint en adoptant le rapport tel qu'il est présenté dans le présent Document préliminaire et ses annexes.

## V. Proposition soumise au CAGP

- 28 Sur la base de ce qui précède, le BP propose la Conclusion et Décision suivante :

Le CAGP prend acte du rapport concernant le Projet HCCH-UNIDROIT sur les actifs numériques et les jetons, incluant les conclusions sommaires sur les éventuels travaux futurs relatifs aux questions de droit international privé liées aux actifs numériques, et décide de mettre un terme aux travaux du projet. Le CAGP exprime sa gratitude envers les experts ayant contribué au projet, ainsi qu'au Secrétariat d'UNIDROIT pour sa collaboration et sa coordination continues avec le BP.

## **ANNEXES**

**Annexe I : Rapport de la réunion de lancement et Liste des participants (La Haye  
(Pays-Bas), le 12 juin 2023)**



## Report of the Kick-off Meeting (The Hague, 12 June 2023)

### I. Organisation

- 1 On 12 June 2023, the Kick-off Meeting for the HCCH-UNIDROIT Digital Assets and Tokens Joint Project (DAT Joint Project) was held at the premises of the Permanent Bureau (PB) in The Hague, from 10.00 a.m. to 4.45 p.m. (CEST). The meeting was held in a hybrid format and included subject-matter Experts identified by the HCCH Member States as well as Experts identified by UNIDROIT.
- 2 Prior to the meeting, the PB and the UNIDROIT Secretariat jointly circulated a draft Scope Paper on 6 June 2023, setting out a list of possible questions that may be relevant to the exploratory study phase of the DAT Joint Project. This draft Scope Paper formed the basis of discussion at the Kick-off Meeting, with the intention of incorporating the outcomes of the discussion at the meeting in an iteration of the draft Scope Paper. The meeting agenda also included discussion of the mandates and working methods of both the HCCH and UNIDROIT, as well as a presentation by UNIDROIT of the background of the Digital Assets and Private Law Project and the Principles on Digital Assets and Private Law (DAPL Principles), in particular Principle 5 (titled “Applicable Law”).
- 3 This document summarises the discussions that took place during the Kick-off Meeting. Using this feedback, the secretariats of the HCCH and UNIDROIT proceeded to revise and circulate an iterated Scope Paper, provided as Annex I to this Report. The Experts were requested to provide their responses to questions in that iterated Scope Paper by Friday 25 August 2023, 5.00 p.m. (CEST). The responses to be provided by the Experts will be jointly compiled by the PB and the UNIDROIT Secretariat. This compilation will be discussed at the second meeting of the DAT Joint Project, which will be held at the premises of UNIDROIT in Rome, from 2-4 October 2023.

### II. Questions and Discussion

1. **Question 1: What definitions, terms and other considerations may be relevant when considering the scope of the study as relating to “the cross-border holdings and transfer of digital assets and tokens”?**
  - a. **What “digital assets and tokens” does this study apply to?**
  - b. **Should a more elaborated definition of assets and tokens be considered? For example, can a list of features, such as was used in the HCCH 1985 Trusts Convention, be helpful?**
  - c. **What (other) terms may need to be defined for the purposes of this study?**
  - d. **What existing instruments and other sources may be helpful for the purposes of this study?**
- 4 Experts discussed the definitional foundations of digital assets using a functional approach, and also cautioned that work on definitions could easily consume time that should be spent on applicable law and other matters in the Scope Paper. There was a suggestion that it may be useful

to conduct a mapping exercise to set out the possible situations involving electronic registers that may raise questions of applicable law.

- 5 Experts discussed the relevance of national regulatory law, and concluded that work under the DAT Joint Project should be consistent with regulatory law. Some Experts suggested that international guidance may fill gaps where national regulation does not yet exist, and that both sources together could serve a common purpose to protect consumers. Experts also noted that private law, private international law, and regulatory law may be driven by different policy considerations, leading to diverging frameworks in each context. Experts noted that there are also possible overlaps, such as when digital assets outside of a regulatory framework are linked to an object that falls within a regulatory framework.

**2. Question 2: What questions arise in relation to the determination of the law applicable in respect of a digital asset?**

- a. *What matters (e.g. proprietary, contractual, tortious etc) arise in respect of digital assets?*
- b. *Are there rules, principles and guidelines existing that are relevant to the determination of the law applicable to the matters listed in Question 2(a)?*
- c. *What other questions may arise?*

- 6 According to the Experts, the UNIDROIT DAPL Principles are specifically designed to cover proprietary issues and do not seek to directly address other matters such as contracts or torts. Thus, the Experts expressed interest that the DAT Joint Project could include work relating to contractual aspects and tortious aspects in respect of digital assets. This could include examining other instruments to determine whether they provide satisfactory guidance on the applicable law.

**3. Question 3: How can the principle of party autonomy be expressed?**

- 7 Experts noted that, in the UNIDROIT DAPL Principles, party autonomy was designed to be the foundation of Principle 5. Expressing a rule for party autonomy at the “top” of the waterfall of rules was intended to motivate market participants to make an explicit choice of law, as there is difficulty in applying other connecting factors to digital assets. A rule designed around party autonomy is also beneficial when there is no choice of law in the digital asset itself, as it may be possible to look to an intermediary business holding the digital asset for the client to determine the applicable law.

- 8 Experts considered ways in which the expression of party autonomy may not be apparent or possible. For example, depending on the nature and degree of decentralisation of a system, multiple parties may be involved in decision-making, and their collective choice, or their consent to a choice, may be difficult to discern. More generally, Experts raised questions about how the choice of law in an asset or system could be read or discerned by a user or interested party.

- 9 On the matter of weaker party protection, some Experts noted that certain businesses may be considered “gatekeeper” platforms due to their particular role and ability to steer behaviour of users; these Experts moreover noted that in such cases, both individuals and businesses may lack the power to bargain for a choice of law when dealing with such platforms.

**4. Question 4: Is further work on the matter of characterisation necessary?**

- 10 Experts noted that further work on characterisation is important because the matter is closely linked to, and must precede, the determination of applicable law. Experts noted that characterisation may be a matter that is often left to the relevant court, but that further clarity could come from international guidance.

**5. Question 5: Should the HCCH-UNIDROIT Digital Assets and Tokens Joint Project also include considerations related to the applicable law rules in contractual aspects in the transaction of digital assets?**

11 The Experts agreed that these considerations should be explored in the project, noting that guidance on contractual aspects would provide legal certainty and predictability in the unique environment of digital assets and tokens. The Experts noted that these matters are not within the scope of Principle 5 of the DAPL Principles and that the DAT Joint Project would be a good forum to explore contractual aspects in the transaction of digital assets.

**6. Question 6: Rules of transfer and / or acquisition: If the answer to the above Question 5 is yes,**

a. ***How would the choice of law rule apply?***

b. ***What considerations arise in situations without a valid choice of law? Should further consideration in relation to private international law rules in such situations be developed?***

c. ***Should the HCCH-UNIDROIT Digital Assets and Tokens Joint Project consider distinguishing B2B from B2C dealings? Should the HCCH-UNIDROIT Digital Assets and Tokens Joint Project cover B2C dealings? And if so, how can it provide protection to consumers?***

12 The Experts noted that the nature of transfer, control and acquisition should be further explored in the DAT Joint Project, as some aspects were addressed in the DAPL Principles and other matters were intended for determination by the applicable law of the jurisdiction. For example, matters for possible further consideration in the DAT Joint Project include: whether digital assets were accessible by third parties and therefore transferable for purposes of insolvency; the innocent acquisition rule; and fungibility of the digital asset in comparison to fungibility of traditional assets.

13 Regarding situations without a valid choice of law, the Experts noted that work could be done to identify and develop objective connecting factors, as the choice of law is not apparent in situations without a registered issuer of an underlying asset. Experts noted that the identification of relevant connecting factors could also be helpful in tort matters, which typically rely on the place where the damage is caused or where the damage occurs.

14 Some Experts also pointed out the benefits of studying other existing instruments or work being carried out in other fora, such as the work of UNCITRAL regarding data transfer contracts and the EU Market in Crypto Assets Regulation.

15 Experts advised that some consideration of the position of consumers should be included within the scope of the DAT Joint Project. While consumer law is likely outside the scope of the DAT Joint Project as a matter of public and substantive law, there are nonetheless inherent questions surrounding consumers as agents and clients within the digital asset economy. Factual links to consumers would also be relevant to the connecting factors analysis.

16 The PB noted that the DAT Joint Project does include a mandate to consider the issue of weaker party protection. Some Experts noted that the term “weaker party” could encompass more than individual consumers and include other situations of power asymmetry, such as in dealings of small enterprises with significantly larger ones. The interaction of party autonomy and weaker party protection would also be relevant. As an illustration, some Experts noted that there may be a well-defined choice of law in a system, but there are possible situations where some parties in a transaction or series of transactions may be weaker than others.

**7. Question 7: Would the addition of a rebuttable presumption of internationality be desirable?**

- 17 Experts noted that there is no requirement of internationality in the DAPL Principles. Experts clarified that the goal of this inquiry was not to re-assess the internationality decisions taken in the DAPL Principles, but to consider whether such a requirement may be needed for other assets and tokens that the DAT Joint Project may address in the future.
- 18 Experts provided examples from other international legal sources, and discussed the option of exploring a rebuttable presumption for cases where more information may be known about the geographic distribution of nodes in a DLT system. For instance, the presumption may be overcome when particular transactions may require only involvement of nodes in a single jurisdiction. Some Experts noted that, on the other hand, even a rebuttable presumption may only serve limited purposes, as the goal of an international instrument would be to address gaps in domestic law.

**8. Question 8: Should more connecting factors be explored in determining the applicable law? If yes, which ones could be considered?**

- 19 Some Experts noted that the matter of the identification of connecting factors was relevant to several questions in the Scope Paper, and agreed that there was room for continued consideration of connecting factors in determining the applicable law, likely outside of the framework of Principle 5 of the DAPL Principles.
- 20 The PB clarified that the DAT Joint Project refers specifically to “digital assets and tokens” rather than merely “digital assets” so as to allow consideration of other categories of items that may not necessarily fall under the DAPL Principles’ definition of an “asset”. With this in mind, work within the scope of the DAT Joint Project may include consideration of connecting factors for various other types of items, including linked assets.

**9. Question 9: Linked Assets**

- a. *In relation to linked assets, are (more traditional) connecting factors relevant? If so, which, and how?*
- b. *Are there other assets that may involve considerations similar to those for linked assets?*

- 21 Linked assets were highlighted for further consideration in the discussion of connecting factors and applicable law under Question 8. In addition to points discussed under Question 8, Experts clarified that the essential questions of linked assets relate to the process of tokenisation and the possible law applicable to the link, digital asset, and represented asset. Some Experts suggested that consideration of concrete examples would help to illustrate the effects of links and claims.
- 22 Experts noted that the DAPL Principles did not prohibit the operation of linked assets, as linked assets would simply be qualified under Principle 5 as digital assets. Some Experts however cautioned that the matter of linkages may differ across jurisdictions and be difficult to harmonise as a matter of substantive law, though it would be possible to discuss and harmonise the law applicable to the existence of the linkage and the legal effects of the linkage.

**10. Question 10: Digital Twins:**

a. *What characteristics may distinguish digital twins from linked assets?*

b. *Do such characteristics have relevance to connecting factors?*

- 23 Experts discussed the possible differences between linked assets and digital twins. A digital twin purports to be an exact representation of its physical counterpart, and the transfer of the digital twin should follow the same rules of transfer of the physical asset. With a digital twin, it is also not necessarily the case that the digital and physical assets are linked. Experts noted that this discussion may overlap with matters of characterisation and taxonomies.

**11. Question 11: Soulbound Tokens (SBTs) / "Social, Community and Reputation Tokens" (SCRTs)**

a. *Can SBTs be used to apply connecting factors related to identity, location?*

b. *What considerations arising from SBTs / SCRTs may be relevant?*

c. *Should more traditional connecting factors be considered in the context of the HCCH-UNIDROIT Digital Assets and Tokens Joint Project?*

- 24 Experts suggested that it may be relevant to consider SBTs for the purpose of the identification of relevant connecting factors because SBTs provide information related to location and identification. Some Experts also suggested that an SBT may be simplified as a non-transferable NFT, and that matters of privacy law related to identity aspects of SBTs would not be within the scope of the project. There appeared to be a consensus among the Experts to monitor developments in SBTs, as practical deployments of SBTs had not reached maturity. One Expert suggested that under the DAPL definition, SBTs would not be considered digital assets, so further consideration must be in the context of the DAT Joint Project's exploratory work that extends beyond Principle 5.

**12. Question 12: Other Novel Assets**

a. *Are there examples of other novel assets that fall outside the categories mentioned above?*

b. *What features / characteristics can be used for connecting factors?*

c. *How can the HCCH-UNIDROIT Digital Assets and Tokens Joint Project address technology neutrality?*

- 25 The Experts reiterated the necessity of the work within the DAT Joint Project remaining technology-neutral, but noted that the demands for specific guidance may produce results that are less future-proof. Some Experts noted that a safer approach might be to base definitions on a functional approach, focused on the most common applications and use cases.

**13. Question 13**

a. *What questions of jurisdiction, and recognition and enforcement, arise in relation to the cross-border holdings and transfers of digital assets and tokens?*

b. *Is further work in relation to these issues feasible and desirable?*

- 26 The PB noted that the output of the DAT Joint Project may benefit from Experts also considering questions of jurisdiction, and recognition and enforcement, in relation to the cross-border holdings and transfers of digital assets and tokens. While reiterating that these questions were outside the current mandate of the DAT Joint Project, Experts were invited to consider the impact of questions related to jurisdiction, and recognition and enforcement, on the output of the exploratory study being undertaken within the scope of the DAT Joint Project, as well as the possibility of further work on these matters.

**List of participants HCCH-UNIDROIT Digital Assets and Tokens Joint Project**

**Kick-off meeting - 12 June 2023**

Family name(s)	Name(s)	States	Position and organisation	Attendance
Álvarez-Rendón	Martha Angélica	Mexico	Director of International Law II, Ministry of Foreign Affairs	Attending online
Alves Pinto	Juliano	Brazil	First Secretary / Head of the Division for International Juridical Cooperation at the Ministry of Foreign Affairs of Brazil	Attending in person
Athanassiu	Phoebus	European Central Bank (ECB)	European Central Bank	Attending online
Barreira	Teresa (Maria)	China (incl. Hong Kong SAR)	Senior Counsel, Office of the General Counsel, Hong Kong Monetary Authority	Attending online
Beaves	Antony	United Kingdom	Senior Legal Counsel in the Financial Stability Division, Bank of England	Attending online
Bernasconi	Christiophe		Secretary-General of the HCCH	Attending in person
Chapot	Philippine		HCCH intern	Attending in person
Cheng	Harry		Legal Officer	Attending in person
Cohen	Neil	United States	Professor of Law at Brooklyn Law School	Attending online
Coudin	Gabrielle	France	Lawyer, Department of Mutual Assistance, Private International and European Law	Attending online
de Franceschi	Alberto	Italy	Full Professor of Private Law, Digital Law and Environmental Sustainability at the University of Ferrara	Attending in person
Dubovc	Marek	United States	Director of Law Reform Programs, International Law Institute	Attending online
Eishied Chang Rosales	Erick Mauricio	El Salvador	Technical expert	Attending online
Frankel-Schroeder	Yaira	Israel	Director of Financial Regulation, Department of Economic Law, Ministry of Justice	Attending online
Goh Escolar	Gérardine		Deputy Secretary-General of the HCCH	Attending in person
Green (deputised by Ms Siona Molony)	Sarah	United Kingdom	Commissioner for Commercial and Common Law, Law Commission of England and Wales	Attending online
Gullifer	Louise	United Kingdom	Rouse Ball Professor of English Law, University of Cambridge / Chair of the UNIDROIT DAPL WG Drafting Committee	Attending in person
Haentjens	Matthias	Netherlands	Professor of Private Law and Director of the Hazelhoff Centre for Financial Law at Leiden University, and Deputy Judge in the Court of Amsterdam	Attending in person
Hameed	Hamza		Legal Consultant, UNIDROIT	Attending online
Heinze	Christian	Germany	Professor at the University of Heidelberg	Attending online
Henríquez Olano	Roberto Alejandro	El Salvador	Technical expert	Attending online
Ihor	Cheban	Ukraine	Chief Specialist of the Expert Group on the Development of New Technologies and Digital Innovations, Directorate of Digital Economy, Ministry of Digital Transformation of Ukraine	Attending online

Kanda	Hideki	Japan	Emeritus Professor, University of Tokyo / Chair of the UNIDROIT DAPL EG	Attending online
Kern	Christoph	Germany	Professor at the University of Heidelberg	Attending online
Lehmann	Matthias	Austria	Professor of Private Law, Private International Law and Comparative Law, University of Vienna	Attending in person
Lemberger-Kenar	Yaara	Israel	Acting Senior Director, Department of Civil Law, Ministry of Justice	Attending online
Liévano Paz	Josué Roberto	El Salvador	Minister Counsellor	Attending in person
Löber	Klaus	ESMA	Chair of the CCP Supervisory Committee at European Securities and Markets Authority (ESMA)	Attending online
Malaguti	Maria Chiara		President, UNIDROIT	Attending online
Mayer	Thomas	Switzerland	Senior legal adviser, Federal Office of Justice FOJ, Private International Law Unit	Attending online
Merlos Narváez	Ariel José	El Salvador	Technical expert	Attending online
Molony	Siona	United Kingdom	Research assistant, Commercial and Common Law, Law Commission of England and Wales	Attending online
Mooney	Charles	United States	Professor of Law, University of Pennsylvania Law School	Attending in person
Morishita	Tetsuo	Japan	Professor, Sophia University	Attending online
Munkh-Undraga	Undraga	Mongolia	Director of the Central Bank of Mongolia, Legal Department, Banking and Financial Law Division	Attending online
Nikolayevskyy	Dmytro	Ukraine	Lawyer of the Project Office on Development of Virtual Assets' Market, under the auspice of the Ministry of Digital Transformation of Ukraine	Attending online
Odinet	Christopher	United States	Professor of Law at University of Iowa College of Law	Attending in person
Omlor	Sebastian	Germany	Professor of Civil Law, Commercial and Business Law, Banking Law, and Comparative Law at the Philipps-Universität Marburg	Attending online
Paech	Philipp	United Kingdom	Professor, London School of Economics	Attending in person
Palma	Rocco		Lawyer-diplomat, UNIDROIT	Attending online
Rocks	Sandra	United States	Counsel Emeritus at Cleary Gottlieb Steen & Hamilton LLP	Attending online
Rodríguez de las Heras Ballell	Teresa	European Law Institute	Co-Reporter of the ELI Access to Digital Assets project	Attending online
Skauradszun	Dominik	Germany	Professor of Civil Law, Civil Procedure and Business Law at the Fulda University of Applied Sciences	Attending in person
Smith	Edwin	United States	Partner at Morgan, Lewis & Bockius LLP	Attending online
Soh	Elisa	Singapore	Assistant General Counsel, Monetary Authority of Singapore	Attending online
Starr	Daniel	El Salvador	Counsellor	Attending in person
Tapper	Michelle Ann		International relationships intern at ROLAC	Attending online
Tirado	Ignacio		Secretary-General of UNIDROIT	Attending in person

Veneziano	Anna		Deputy Secretary-General of UNIDROIT	Attending online
Vondracek	Ondrej	European Commission	DG Justice and Consumers, Civil Justice Unit	Attending online
Zhao	Ning		Principal Legal Officer	Attending in person

## **Annexe II Document de cadrage révisé**

PROJET CONJOINT SUR LES  
ACTIFS NUMÉRIQUES ET LES  
JETONS

11 JUILLET 2023



## Projet conjoint HCCH-UNIDROIT sur les actifs numériques et les jetons : Document de cadrage révisé

## **Table des matières**

I.	Définitions.....	3
II.	Neutralité sur le plan technologique.....	4
III.	Autonomie des parties .....	5
IV.	Caractérisation, facteurs de rattachement et internationalité.....	5
V.	Aspects contractuels : Règles générales régissant les actifs numériques .....	6
VI.	Loi applicable : Questions de fond .....	8
VII.	Autres questions de droit international privé.....	9

# Projet conjoint HCCH-UNIDROIT sur les actifs numériques et les jetons : Document de cadrage révisé

- 1 Le présent document de cadrage révisé expose les questions qui ont été abordées lors de la réunion de lancement tenue le 12 juin 2023 dans les locaux du Bureau Permanent (BP) de la HCCH à La Haye (Pays-Bas). Certains experts ont pris part à cette réunion en ligne par l'intermédiaire de la plateforme Microsoft Teams. L'objectif de la réunion de lancement était d'identifier toutes les questions susceptibles d'être pertinentes dans le contexte du Projet conjoint HCCH-UNIDROIT sur les actifs numériques et les jetons (Projet conjoint).
- 2 Le Groupe de travail sur les actifs numériques et le droit privé d'UNIDROIT (Groupe de travail d'UNIDROIT) a déterminé que l'établissement de règles claires s'appliquant aux actifs numériques et aux jetons, y compris en matière de droit international privé, offrirait plusieurs avantages aux États, notamment une efficacité accrue et une réduction des coûts<sup>1</sup>. Alors que les travaux sur les Principes d'UNIDROIT sur les actifs numériques et le droit privé (Principes d'UNIDROIT) étaient en cours d'achèvement, le BP et le Secrétariat d'UNIDROIT se sont penchés sur la question de la poursuite d'une collaboration dans le cadre d'un projet conjoint axé sur les actifs numériques et les jetons. Le champ d'application de ce projet conjoint proposé s'appuierait, de manière générale, sur les travaux réalisés par le Groupe de travail d'UNIDROIT et permettrait d'approfondir ces travaux, en mettant particulièrement l'accent sur le Principe 5 du projet de Principes d'UNIDROIT.
- 3 Le Projet conjoint vise à examiner « l'opportunité de disposer d'une orientation coordonnée et la possibilité d'élaborer un cadre normatif sur la loi applicable à la détention et aux transferts transfrontières d'actifs numériques et de jetons, couvrant les aspects pertinents de droit privé »<sup>2</sup>, et vise à produire un rapport sur les « résultats de ce projet à [l'organe directeur respectif] lors de sa réunion de 2024, [et de formuler] entre autres des propositions sur l'opportunité et la possibilité de poursuivre les travaux sur cette question par la mise sur pied d'un Groupe d'experts conjoint »<sup>3</sup>. Le présent document de cadrage révisé énumère autant de questions pertinentes que possible, dans le but de fournir aux experts une liste exhaustive de sujets de discussion devant déterminer les contours du champ d'application de ce Projet conjoint. Les questions énumérées n'excluent pas d'autres sujets que les experts pourraient souhaiter aborder dans le cadre de ce Projet conjoint.

---

<sup>1</sup> [Principes d'UNIDROIT sur les actifs numériques et le droit privé](#), avril 2023, tels que soumis et approuvés par le Conseil de Direction, UNIDROIT Doc. C.D. (102) 6, para. 20.

<sup>2</sup> Conclusion et Décision No 18 (CAGP de la HCCH de 2023); voir aussi HCCH [Doc. Prél. No 3C de janvier 2023, « Proposition de travail conjoint :Projet HCCH-UNIDROIT sur la loi applicable aux détentions et transferts transfrontières d'actifs numériques et de jetons](#), et UNIDROIT, [Doc. C.D. \(102\) 12, « Projet HCCH-UNIDROIT sur la loi applicable aux détentions et transferts transfrontières d'actifs numériques et de jetons »](#).

<sup>3</sup> Conclusion et Décision No 18 (CAGP de la HCCH de 2023).

## I. Définitions

1. Définitions générales : Quelles sont les définitions, termes et autres considérations à prendre en compte lors de la délimitation du champ d'application de l'étude en ce qui concerne « la détention et le transfert transfrontières d'actifs numériques et de jetons » ?
  - a) Quels sont les « actifs numériques et les jetons » visés par cette étude ? Il convient de noter que l'expression « actifs numériques et jetons » employée dans le cadre de cette étude exploratoire a une acceptation plus large que l'expression « actifs numériques » employée dans les Principes d'UNIDROIT. Quelles considérations liées aux questions de propriété sur les « actifs numériques et les jetons » pourraient être soulevées ?
  - b) Convient-il d'envisager d'élaborer une définition plus détaillée des actifs et des jetons ? Une définition négative pourrait-elle s'avérer judicieuze ? Une liste de critères, similaire à celle utilisée dans le cadre de la Convention HCCH Trust de 1985, pourrait-elle être utile ?
  - c) Quels (autres) termes devraient être éventuellement définis dans le cadre de cette étude ? Une extension du champ d'application des actifs et des jetons nécessiterait-elle une clarification approfondie des plateformes, systèmes et autres termes relatifs aux infrastructures ?
- 4 L'un des résultats de la Conférence inaugurale de la HCCH sur le droit commercial, numérique et financier transfrontière (Conférence CODIFI) a été la conclusion exprimée par plusieurs experts selon laquelle les travaux sur le droit international privé relatif aux actifs numériques, en particulier la détermination de la loi applicable, sont à la fois opportuns et souhaitables. Cette question générale vise à amorcer l'étude à partir d'une perspective globale, dans le but de cartographier les questions de loi applicable qui se posent dans le contexte des actifs numériques. Cette question vise également à permettre l'examen des termes qu'il serait judicieux de définir dans le cadre de cette étude, tout en veillant à ce que les instruments existants et d'autres sources potentiellement utiles soient pris en compte dans le contexte de cette étude exploratoire.
- 5 Les considérations relatives au droit réglementaire comprennent les questions suivantes : Quelle est la pertinence du droit réglementaire national ? Comment garantir que les résultats de ce projet sont conformes au droit réglementaire et ne l'enfreignent pas ? Des orientations internationales pourraient-elles combler les lacunes dans les domaines où il n'existe pas encore de réglementation interne ? Le droit réglementaire et les résultats de ce projet serviraient-ils un objectif commun de protection des consommateurs ?
- 6 Étant donné que certains termes ont déjà été définis dans le cadre des travaux entrepris avant que ce Projet conjoint ne voie le jour, en particulier les travaux du Groupe de travail d'UNIDROIT ayant abouti à l'adoption des Principes d'UNIDROIT, et que certains termes utilisés aux fins de l'étude exploratoire ont une acceptation plus large, de quelle manière le Projet pourrait-il contourner un processus de définition chronophage et fastidieux, alors que la priorité devrait être accordée aux questions de loi applicable ?
- 7 Quels sont les instruments en vigueur ou autres sources susceptibles d'être utiles aux fins de cette étude ?

2. Actifs numériques : En ce qui concerne la définition des « actifs numériques », étant donné que les lois relatives à la propriété et au transfert dépendent également de la nature de chaque actif, serait-il utile de fournir une définition plus détaillée ou plus précise des types d'actifs numériques suivants :
  - a) *les représentations tokenisées d'actifs réels (par ex., le fractionnement d'un bien immobilier) ou d'instruments financiers conventionnels (par ex, une obligation ou une action) ;*
  - b) *les jetons qui représentent un risque économique pour l'actif réel ou pour l'instrument financier sous-jacent sans pour autant conférer de droits de propriété ;*
  - c) *les titres ou autres jetons natifs émis sur la TRD (par ex., le bitcoin) ;*
  - d) *les jetons de paiement numérique utilisés pour le règlement des transactions basées sur la TRD (par ex. MNBC, dépôts tokenisés) ?*
3. Transactions : En ce qui concerne les transactions, serait-il utile de prévoir d'autres scénarios en plus de celui impliquant un émetteur ? Par exemple, serait-il pertinent d'envisager des scénarios qui concernent :
  - a) *l'échange / le transfert d'actifs numériques ;*
  - b) *dans le contexte des instruments financiers tokenisés, la compensation et le règlement-livraison d'actifs numériques ; et*
  - c) *la gestion et la détention de l'actif pendant son cycle de vie ?*
4. Contrôle et garde : Serait-il pertinent de préciser également comment les règles de loi applicable s'appliqueraient dans différentes situations impliquant les concepts de « contrôle » et de « garde » ?
  - a) *Par exemple, serait-il possible pour deux parties situées dans deux ressorts juridiques différents de revendiquer le « contrôle » ou la « garde » d'un actif numérique et, le cas échéant, comment cela pourrait-il être concilié ?*
  - b) *Comment les notions de « contrôle » et de « garde » seraient-elles applicables dans le cadre des différents types d'actifs ou de systèmes numériques mentionnés précédemment?*

## II. Neutralité sur le plan technologique

5. Neutralité sur le plan technologique : Afin de garantir la pérennité du Projet conjoint, comment la neutralité sur le plan technologique peut-elle être envisagée dans le contexte des actifs numériques et des jetons ?
- 8 Quels sont les obstacles à la neutralité sur le plan technologique dans le cadre de ce Projet conjoint ? Comment les résultats de cette phase exploratoire et du Projet conjoint peuvent-ils concilier généralité et spécificité ? Une approche consistant à définir les notions sur la base d'une approche fonctionnelle, ou d'une approche fonctionnelle équivalente, est-elle utile ? Cette approche présente-t-elle des limites ?

### **III. Autonomie des parties**

6. **Autonomie des parties : Comment le principe de l'autonomie des parties pourrait-il être exprimé ?**

a) **Comment l'autonomie des parties s'exprimerait / devrait-elle être exprimée dans un : (1) réseau privé autorisé ; (2) réseau public autorisé ; ou (3) réseau public non autorisé ?**

9 Dans la pratique, les parties exercent-elles une influence substantielle sur les actifs ou les plateformes dans lesquels une loi applicable est déjà désignée ? Comment le principe de l'autonomie des parties peut-il être exprimé et de quelle manière est-il possible d'identifier cette autonomie dans un système spécifique ? Cette étude devrait-elle comprendre des considérations relatives à la protection des parties faibles dans les transactions relatives aux actifs numériques et aux jetons et, le cas échéant, de quelle manière ?

10 Le Groupe de travail d'UNIDROIT a pris en considération le principe de l'autonomie des parties tout au long de ses travaux sur les Principes d'UNIDROIT. Ce principe constitue la pierre angulaire de la structure en cascade du Principe 5 : le choix exprès de la loi applicable. La certitude instaurée par le Principe 5 pourrait motiver davantage d'exercices d'autonomie / de choix exprès de la loi, bien que des travaux supplémentaires puissent être utiles pour élaborer des règles en l'absence de choix exprès. Une question connexe est de savoir comment un « choix » peut être exprimé ou discerné de l'actif ou du système, compte tenu de la difficulté d'identifier pleinement les parties à la transaction. Une autre question est de savoir comment déterminer si le principe de l'autonomie des parties est présumé satisfait par le consentement à l'utilisation d'un tel système, en particulier lorsque le consentement n'a pas été expressément donné.

### **IV. Caractérisation, facteurs de rattachement et internationalité**

7. **Caractérisation : Est-il nécessaire de travailler sur la question de la caractérisation ?**

a) **Quelles sont les questions qui se posent en ce qui concerne les actifs numériques (par ex., en matière de propriété, de contrat, de délit, etc.) ?**

b) **Quels sont les domaines qui peuvent être pris en considération ?**

c) **Quels sont les objectifs d'une orientation sur chaque caractérisation ?**

11 Pour déterminer la loi applicable, est-il nécessaire de continuer à travailler sur la caractérisation des actifs numériques et des jetons ? Peut-on élaborer des règles ou des orientations relatives à la détermination de la loi applicable sans poursuivre les travaux de caractérisation ? Les questions liées à la caractérisation, y compris les droits et obligations qui pourraient en découler, devraient-elles être laissées à l'appréciation de chaque juridiction ?

12 Pour les juridictions qui cherchent à caractériser les questions qui leur sont soumises, afin d'améliorer la sécurité juridique, est-il nécessaire de se pencher sur les questions de caractérisation (actifs ou jetons) qui impliquent le droit des obligations ?

**8. Facteurs de rattachement : Faut-il examiner davantage de facteurs de rattachement pour déterminer la loi applicable, en ce qui concerne chaque qualification juridique ? Dans l'affirmative, quels sont les facteurs qui pourraient être pris en considération ?**

- 13 Bien que les actifs numériques aient une nature virtuelle, en raison de la diversité des actifs numériques existants, d'autres facteurs de rattachement pourraient s'avérer pertinents, y compris des facteurs traditionnels, dans le contexte des travaux futurs sur les actifs numériques et les jetons. Par exemple, des méthodologies tenant compte de la nature factuelle distincte des actifs, des liens entre les actifs physiques et numériques, ou de la méthode de stockage pourraient être envisagées. Quelles sont les difficultés ou les défis que peut poser la prise en compte de ces autres méthodologies ?
- 14 En ce qui concerne les questions portant sur la propriété, si d'autres facteurs de rattachement sont examinés, de quelle manière ce travail viendrait-il compléter ou s'appuyer sur le Principe 5 des Principes d'UNIDROIT, notamment en l'absence d'un choix exprès de loi applicable ? Comment intégrer dans ces considérations l'incitation exprimée dans le Principe 5 des Principes d'UNIDROIT en faveur d'une plus grande conformité et d'une meilleure transparence (et conférant une certaine importance au critère principal de sa structure en cascade) ?
- 15 Dans le cadre d'orientations plus générales, quels sont les facteurs de rattachement qui pourraient être pris en considération, notamment en ce qui concerne les actifs liés ? (voir question 12 ci-dessus)

**9. Internationalité : Est-il nécessaire ou souhaitable de prendre en considération une présomption réfutable d'internationalité ?**

- 16 Bien qu'il n'ait pas été clairement nécessaire d'ajouter une présomption d'internationalité au Principe 5 des Principes d'UNIDROIT, il reste toujours possible de considérer une présomption réfutable d'internationalité en ce qui concerne d'autres actifs numériques et jetons qui pourraient être inclus dans le Projet conjoint. Afin de garantir un champ d'application universel en raison de la nature des actifs numériques, il peut être important de se demander si un élément d'internationalité est nécessaire pour déclencher l'application d'une règle de conflit de lois, notamment dans la détermination de la loi applicable.

## V. Aspects contractuels : Règles générales régissant les actifs numériques

**10. Aspects contractuels : Est-ce que le Projet conjoint devrait également inclure les questions liées aux règles de loi applicables aux aspects contractuels de la transaction d'actifs numériques ?**

- 17 Les Principes d'UNIDROIT fournissent des orientations concernant les questions de propriété sur les actifs numériques. Y a-t-il d'autres questions, telles que celles relevant de la responsabilité contractuelle ou délictuelle, qui pourraient être examinées dans le cadre de cette étude ? Le cas échéant, existe-t-il des règles, principes ou orientations qui pourraient s'appliquer à ces autres questions ?
- 18 Au-delà de son application aux questions portant sur la propriété, le Projet devrait-il également s'attacher à définir des règles de loi applicable pour les aspects contractuels des transactions d'actifs numériques ?
- 19 Dans ce contexte, les Principes de 2015 de la HCCH sur le choix de la loi applicable aux contrats commerciaux internationaux (Principes de la HCCH) pourraient s'avérer pertinents. Les Principes

de la HCCH ne traitent pas des aspects patrimoniaux des actifs, y compris des actifs numériques, mais se concentrent exclusivement sur le choix de la loi convenue par les parties dans les cas de transactions entre entreprises (B2B). Existe-t-il d'autres instruments qui pourraient être pertinents ?

**11. Règles de transfert et / ou d'acquisition : En cas de réponse positive à la question 10 ci-dessus concernant les aspects contractuels :**

**a) Comment la règle de conflit de lois s'appliquerait-elle ?**

20 Les Principes d'UNIDROIT autorisent les parties à choisir la loi applicable aux questions de propriété sur les actifs numériques, mais ce choix est limité au droit interne de l'État expressément spécifié dans l'actif numérique ou le système / la plateforme. Une approche similaire serait-elle pertinente pour les aspects contractuels de la transaction d'actifs numériques ? Par exemple, quelles considérations spécifiques, s'il y en a, pourraient émerger lors de l'examen des transactions contractuelles impliquant des actifs numériques ? Les Principes de la HCCH, qui n'imposent aucune restriction quant au choix des parties en matière de loi applicable dans les relations contractuelles entre entreprises (B2B), sont-ils pertinents à cet égard ? De quelle manière les parties peuvent-elles exprimer leur accord concernant le choix de la loi applicable ? La règle de choix de loi dépend-elle de la caractérisation de la détention et / ou du transfert de l'actif numérique ou du jeton ? La fongibilité de l'actif numérique ou du jeton constitue-t-elle un facteur pertinent à prendre en considération ?

21 Les questions relatives à la garde, au transfert et / ou à l'acquisition relèvent-elles à la fois du droit des obligations et du droit des biens et, le cas échéant, est-il approprié de fournir des orientations sur ces aspects ?

**b) Quels sont les éléments à prendre en considérations dans les cas où aucun choix de loi valide n'est établi ? Une réflexion approfondie sur les règles de droit international privé dans de tels cas est-elle nécessaire ?**

22 Les Principes d'UNIDROIT renvoient aux règles générales en l'absence de choix de loi applicable en matière de propriété sur les actifs numériques. Pour les questions de propriété et les questions contractuelles, cette étude exploratoire devrait-elle aborder en détail les implications de ces règles générales lorsque les parties ne désignent pas de loi applicable dans les transactions d'actifs numériques et de jetons, ou lorsque la loi choisie dans ces transactions n'est pas valide ? Ces considérations devraient-elles également englober des aspects relatifs à la responsabilité civile ou à d'autres questions connexes ?

**c) En ce qui concerne la protection des consommateurs dans le choix de la loi applicable, serait-il pertinent pour le Projet conjoint d'établir une distinction entre les transactions entre entreprises (B2B) et celles entre une entreprise et un consommateur final (B2C) ?**

23 D'autres branches du droit privé s'appliqueront également aux actifs numériques et aux jetons, y compris le droit de la consommation. Bien que la protection des consommateurs soit une matière exclue des Principes d'UNIDROIT, la sécurité juridique offerte par les Principes d'UNIDROIT peut être considérée comme une protection à l'égard des consommateurs. Il convient de noter que la définition d'un consommateur peut varier d'un État à l'autre. Toutefois, convient-il d'envisager d'explorer d'autres facteurs de rattachement en lien avec les consommateurs (voir la question 8 ci-dessus) ? Il est important de souligner que l'expression « partie faible » ne se limite pas exclusivement à un consommateur individuel ; elle peut également inclure les petites entreprises qui, comparées aux grandes entreprises, peuvent également remplir les conditions requises. Le

Projet conjoint devrait-il s'attaquer au déséquilibre de pouvoir qui survient lorsqu'une entreprise est en mesure d'imposer les mêmes conditions à tous ses clients ?

- 24 Quels autres domaines doivent être pris en considération ? Comment les considérations en matière de droit international privé s'articulent-elles avec ces autres branches du droit privé ?

## VI. Loi applicable : Questions de fond

**12. Actifs liés : En ce qui concerne les actifs liés, est-ce que des facteurs de rattachement (plus traditionnels) sont pertinents ? Dans l'affirmative, lesquels et comment ? Est-il possible de fournir des indications supplémentaires sur la loi applicable aux liens, aux jetons et aux créances résultant de l'établissement d'un lien ?**

- 25 Quels éléments doivent être pris en compte en ce qui concerne les actifs corporels ou incorporels liés ? Est-ce que ces actifs liés soulèvent des considérations pertinentes en matière de droit international privé ?

- 26 Les Principes d'UNIDROIT fournissent des commentaires sur les actifs liés dans le cadre du Principe 4 et, sur cette base, appliquent le Principe 5 pour traiter des questions générales relatives aux actifs liés. Il pourrait être envisagé d'apporter des précisions sur les actifs liés dans le cadre de ce Projet conjoint, surtout étant donné l'absence de législation en la matière dans la plupart des États. Les actifs liés sont essentiellement définis par le lien entre l'éventuelle loi applicable à l'objet original, les liens et la représentation numérique. La création factuelle d'un lien est une question distincte. Les travaux menés dans le cadre de ce Projet conjoint pourraient porter sur les questions de propriété sur les actifs composant un actif lié, ainsi que sur la nature juridique du lien qui les unit. L'harmonisation des règles relatives aux actifs et aux liens pourrait également être une autre question à explorer, étant donné que les actions ou les créances concernant un aspect de l'actif lié n'ont pas nécessairement d'effet correspondant sur un autre aspect. Cependant, il convient de se demander si le Projet conjoint ne risque pas d'être perçu comme trop intrusif dans les cadres nationaux en fournissant de telles orientations.

**13. Jumeaux numériques : Quelles sont les caractéristiques qui permettent de distinguer les jumeaux numériques des actifs liés ? Existe-t-il une distinction suffisamment claire pour justifier que les deux soient traités comme des actifs ou des jetons distincts aux fins de la législation applicable ? Ces caractéristiques sont-elles liées aux facteurs de rattachement ?**

- 27 La distinction entre les actifs liés et les jumeaux numériques réside dans le fait qu'un jumeau numérique est une représentation exacte de l'objet physique, et le transfert du jumeau numérique suit la même règle que le transfert de l'actif physique. Dans ce cas, les spécificités du système / plateforme et de la méthode de transfert pourraient devenir plus pertinentes. Les considérations liées aux jumeaux numériques se chevauchent-elles ou présentent-elles des différences significatives par rapport à celles soulevées par les actifs liés ?

**14. Autres actifs et jetons innovants : Quelles catégories générales d'actifs innovants et / ou de jetons pourraient être envisagées dans le cadre du Projet conjoint ?**

- 28 Existe-t-il des exemples d'autres actifs innovants qui n'entrent pas dans les catégories mentionnées ci-dessus (par ex., les jetons Soulbound) ? Ces nouveaux actifs, en particulier ceux qui comprennent des données de localisation ou d'identification significatives, nécessiteront-ils que le Projet conjoint envisage une définition des « jetons numériques » distincte de celle des « actifs numériques » et allant au-delà du champ d'application actuellement couvert par le

Principe 5 des Principes d'UNIDROIT ? Quelles sont les catégories générales d'actifs innovants et / ou de jetons qui pourraient être prises en considération ?

## VII. Autres questions de droit international privé

### 15. Compétence, reconnaissance et exécution

- a) *Quelles questions de compétence, de reconnaissance et d'exécution se posent en ce qui concerne la détention et le transfert transfrontières d'actifs numériques et de jetons ?*
- b) *Est-il possible et souhaitable de poursuivre les travaux sur ces questions ?*

29 Étant donné que les actifs numériques et les systèmes sur lesquels ils sont enregistrés peuvent ne pas être physiquement localisés, et que ceux qui les contrôlent peuvent se trouver dans différents États et territoires, les procédures ou processus d'exécution sont susceptibles d'être transfrontières et d'impliquer des tribunaux ou des autorités publiques dans plusieurs États et territoires. Bien que les questions de compétence (compétence du tribunal) et de reconnaissance et d'exécution des jugements étrangers soient exclues du champ d'application de cette étude exploratoire, certaines de ces questions se posent-elles dans le contexte des actifs numériques et des jetons ? Serait-il possible et souhaitable de poursuivre les travaux sur ces questions ?

-----

**Annexe III Rapport de la deuxième réunion et Liste des participants (Rome  
(Italie), du 2 au 4 octobre 2023)**



**HCCH-UNIDROIT Joint Project on  
Applicable Law to Cross-Border  
Holdings and Transfers of Digital  
Assets and Tokens**  
**Second Preparatory Meeting (hybrid)**

Rome, 2-4 October 2023

UNIDROIT 2023  
Study LXXXIIA – P.M.2 – Doc. 3  
English-only  
November 2023

### **SUMMARY REPORT**

1. From 2 to 4 October 2023, a second preparatory meeting of the HCCH-UNIDROIT Joint Project on Applicable Law to Cross-Border Holdings and Transfers of Digital Assets and Tokens (hereinafter “the Joint Project” or “the Project”) was held at the seat of UNIDROIT and via videoconference. Forty-one members of the group, six members of the UNIDROIT Secretariat, and six members of the HCCH Secretariat participated (a list of participants can be found in Annexe II).

2. The session was chaired by *the UNIDROIT Secretary-General Mr Ignacio Tirado* (hereinafter “the Chair”), with the close cooperation of the *HCCH Deputy Secretary General, Ms Gerardine Goh Escolar*.

**Item 1 on the Agenda: Opening of the meeting and welcoming remarks by the UNIDROIT Secretary-General and the HCCH Deputy Secretary General**

3. *The President of UNIDROIT, Ms Maria Chiara Malaguti*, opened the session at 11:00 CEST and welcomed all participants. *The HCCH Deputy Secretary General and the Chair* also thanked the participants for their involvement in the project.

**Item 2 on the Agenda: Adoption of the agenda and organisation of the sessions**

4. *The Draft Agenda was adopted as proposed (the Agenda can be found in Annexe I).*

**Item 3 on the Agenda: Consideration of substantive issues (Study LXXXIIA – P.M.2 – Doc. 2)**

5. *The Chair referred to P.M.2 Doc. 2 and called for comments on the Scope Paper, starting from “definitions” and “technology neutrality”.*

6. One expert sought preliminary clarification around the purpose of the meeting. This expert’s understanding was that it was a meeting to decide whether the future project could build on Principle 5 of the UNIDROIT Principles on Digital Assets and Private Law (PDAPL) with respect to private international law issues. If so, then the question would be whether there should be a broader definition of “digital asset” (DA) for the purposes of private international law issues. Another expert sought more guidance around (i) whether experts were supposed to generate a “map of gaps” concerning Principle 5 and areas where useful work could be done, and (ii) whether substance should be discussed, given that the comments in the expert responses also touched upon material substance.

7. *The Chair and the HCCH Deputy Secretary General* confirmed that the Project should build on Principle 5, completing its part on applicable law, and that there was no intention to revise the PDAPL, which had recently been approved (May 2023) by the UNIDROIT Governing Council. Both organisations had specific instructions from their governing bodies to consider private international law issues, and what was now being discussed at this stage was whether the experts recommended that more needed to be done in relation to applicable law matters. As to mapping the gaps, the key question was whether the experts had elements to add to Principle 5. *The HCCH Deputy Secretary General* added that the focus of the exploratory study was on the feasibility and desirability of the Project, and its scope. Following the meeting, a proposal would be submitted to the HCCH Council on General Affairs and Policy (CGAP), indicating whether it was desirable to continue the work on the Project.

8. Former members of the Working Group on Digital Assets and Private Law ("DAPL Working Group") clarified that the definition of DA in the PDAPL was closely linked with the principle prescribing that "a digital asset is capable of being the subject of proprietary rights"; thus, the idea of expanding the kinds of assets to which a certain law would apply, with respect to issues other than proprietary issues, was clearly open. Also, at the bottom of the waterfall in Principle 5, the role of the private international law of the forum opened the discussion on other connecting factors.

9. Some experts expressed concerns on the accuracy and reach of the definition of DA in the PDAPL. Experts from France expressed concerns around the very broad definition of digital assets in relation to applicable law issues and noted that it might potentially have an impact on regulatory law and the protection of investors. Financial instruments, such as digital securities, could be excluded from the DA definition in the context of the French regulatory framework according to how they classified control and proprietary rights. The concern expressed by the experts was that Principle 5 might leave to the parties the possibility of evading mandatory domestic rules on proprietary issues. One expert noted that further discussion on Principle 5 could be needed to make it feasible to non-common law countries. It was also queried what kind of instrument would be finally adopted, and if the final instrument could be a convention, i.e. hard law. A mandatory HCCH instrument with overly broad definitions may have an impact on the legal systems of HCCH Members. Experts took the floor to note their opinion that, given their concerns, unless the Joint Project would involve a reopening and revision of Principle 5 in relation to the concerns they had raised about regulatory matters and the party autonomy rule at the top of the waterfall, they would not be in the position to recommend the continuation of work under the Joint Project. Several experts from other jurisdictions expressed their disagreement with the statements made by the experts from France, [noting that Principle 5 had no impact on overriding domestic regulatory frameworks, and] stating their preference instead for work under the Joint Project to continue.

10. *The Chair and the HCCH Deputy Secretary General* highlighted that concerns on regulatory law should be discussed in this forum only in the context of applicable law questions, and not in connection with PDAPL definitions. The discussion should not turn on whether experts agreed with the definitions in the PDAPL or not, but rather on whether there were areas that needed to be completed for the exclusive purpose of applicable law. *The Chair* also clarified that the PDAPL were a soft-law instrument, and thus not mandatory in any case. They were available for legislators who wanted to adapt it into their legal frameworks. The experts could explore the possibility of enhancing the framework in Principle 5 covering parts uncovered or adding extra elements to the waterfall criteria there provided. *The Chair and the HCCH Deputy Secretary General* also clarified that what was being discussed was not a HCCH instrument but rather a joint instrument, and that the format of the instrument, whether hard- or soft-law, was still open to discussion.

11. One former member of the DAPL Working Group emphasised that the PDAPL were only about private law and did not cover rules enforced by public authorities (regulatory law). Other former members clarified that a DA in the PDAPL was simply an electronic record to which a tangible or intangible asset could be linked (claims, rights, including securities). The link could be factual, but,

as a matter of law, whether a link was valid and effective was dictated by the applicable law, which would indeed be one of the issues the Project aimed at examining. The experts should thus discuss the extent to which a State might dictate under its law that the electronic record itself embodied a financial asset for regulatory and policy purposes, and not leave the digital asset to dictate the law governing the link.

12. Many experts agreed that nothing in the PDAPL suggested that a State could not put regulatory limits on the applicable law of financial assets traded on its markets, and that there was no contradiction between regulatory law in a certain State (including under EU law, e.g. the Markets in Crypto-Assets Regulation) and Principle 5. If a State passed a statute prescribing when there was an effective link between a security and a digital asset, provided that such was the applicable law, that statute would be of special relevance to that specific type of asset over general law and would apply as a matter of substantive law. This regarded not only the field of digital securities, but also company law (voting rights in a general meeting, corporate actions relating to bond issuing). It was remarked that it was part of the work under the Project to establish the most suitable rules for markets and clarify what the applicable law would be in each context. In terms of methodology, the Joint Project should treat each country's national law as if it were in a black box and identify the principles on applicable law from the perspective of courts. Courts that wished (or were bound) to apply a certain mandatory law (such as French law) would certainly consider that law and apply regulatory rules that covered proprietary aspects.

13. One expert from France recalled that, in France, as in many other civil law jurisdictions, the civil code established rights of possession or ownership on securities, but numerous commercial and financial laws applied to give effect to those rights with much more detailed prescriptions (including regulatory law prescribing that custody recognise ownership rights in the securities). In French law, many "proprietary issues" of Principle 5 would fall under regulatory law. Principle 5 would cover proprietary issues in respect of DA and, from a French law standpoint, if the final instrument resulting from the Project were mandatory, it would override French regulation.

14. *The Chair* welcomed the explanations and posited that a lack of separation between the digital asset and the security itself might be a specificity of the French system that needed to be discussed, but it was not necessarily linked with other civil law countries. Hard law would override French law only if France approved such an instrument. The Chair added that a French regulation that identified a specific conflict-of-law rule which safeguarded the French system would be perfectly applicable in the context of the PDAPL and would not contradict any of their content, including Principle 5. The Chair emphasised that the PDAPL had received significant endorsements from many countries of the world and that they had been discussed following a standard methodology which included the formation of a working group with experts from all legal families, plus the input of dozens of observer institutional organisations and even a greater public consultation over several months. *The HCCH Deputy Secretary General* underscored that the Joint Project was an international collaboration that should build on Principle 5 of the PDAPL while remaining entirely consistent with it, and that feasibility was indeed the basic question put forward.

15. In this regard, one expert proffered the question as to whether the purpose of the Project was to augment Principle 5 (in which case the resulting instrument, including definitions, would apply only in States that had enacted legislation based on the PDAPL) or rather to produce free-standing choice-of-law rules entirely consistent with Principle 5, but which could also apply in States that had not enacted legislation based on the PDAPL (thus possibly expanding the reach of the local instrument by indicating to other States' courts that they should apply the law of a PDAPL-enacting State).

16. *The Chair and the HCCH Deputy Secretary General* confirmed that the aim was to elaborate free-standing choice-of-law rules entirely consistent with Principle 5, as the other option would entail the risk of fragmentation and uncertainty.

17. One expert asked for clarification concerning the extent of the expressions “enhancing” or “adding extra elements” to Principle 5, as the difference between those expressions as opposed to the term “revising” is not easy to discern.

18. *The Chair* reminded the experts that, while the definition of DA was broad and designed to encompass all electronic records, Principle 5 was rather limited in scope and did not cover many aspects that needed to be enhanced by identifying the applicable law, such as contractual aspects or linked assets (even though this might be less relevant for the French legal system in light of its law on securities). The collaboration with HCCH was an opportunity to cover these aspects. A former member of the DAPL Working Group added that it had been decided not to adopt any substantive law principle on linked assets, as a DA might or might not be linked to another asset, and it was up to the applicable law to define the existence and the nature of that link. As Principle 5 did not include any parameters to identify the law applicable to linked assets, it effectively left room to discuss on how to enhance it.

19. *The HCCH Deputy Secretary General* suggested to look at the debated issues, including definitions, from the angle of the areas of work that the Joint Project might develop. Reference to the term “tokens” in the title of the Joint Project had been intended to open up avenues to discuss other definitions and possibly enlarge the scope.

20. *The Chair* specified that the PDAPL had a definition in the interest of the Principles themselves, being a soft-law instrument to guide legislation in a country, and if a country was willing to implement the Principles and exclude certain types of digital assets, this was not against the Principles. The PDAPL were not a treaty but rather offered guidance for legislators.

21. A certain preference was expressed by several experts for the Project to proceed, and perhaps to conclude with a soft-law instrument. This solution would allegedly be more flexible and therefore more susceptible to embracing different legal traditions and domestic laws, but also to adapting to the moving target of the digital world. A hard-law instrument, on the other hand would, according to these experts, have its content frozen at the moment of conclusion.

22. Some experts highlighted the need to maintain a comprehensive approach and strict coordination between the definitions in the two instruments, so as not to create two disconnected instruments.

#### *On definitions*

23. *The Chair* suggested to move ahead in the discussion and look into the possible subject matter of future work, such as applicable law rules on linked assets, or the meaning to be attributed to the word “token”, particularly if a more granular definition of aspects concerning tokens would be necessary.

24. Some experts suggested to continue the discussion on definitions from the angle of the scope of the project, i.e. look into what would be useful to cover, drawing a line between what was already covered in the PDAPL, and what remained outside. Only then would it be possible to label further elements. Other experts suggested a functional approach that could look at key features that would clearly mark the entity. The definition of token should also be abstract and technologically neutral, to provide certainty to market participants and jurisdictions.

25. Many experts agreed that there was a need for more granular definitions – not only of the term “token”, but of all the terminology used in the “crypto space”. However, the need for granularity should be balanced with the principle of technology neutrality, as at a certain moment the need for granularity would generate consideration of specific technological contexts or solutions. The concern was also expressed that granularity should be conjugated with the normal rate of evolution of the

markets for tokens and crypto assets, as opposed to securities, which still appeared immature. A functional approach to definitions might be internally contradictory with the quest for more granularity. A detailed analysis of uses, cases and situations that might fall under the definition might be useful to discuss the rules on conflicts of law and determine what connecting factors would be most appropriate.

26. One expert noted that, when defining digital tokens, there was the need to consider the interplay between tokens and the types of transactions that the Project should cover. If the group decided to deal with situations such as holdings or transfers, the definition of DA could be too narrow and there could be a need to connect the kind of transaction with the types of tokens that were involved in that transaction. In this sense, there was a need to identify in a more granular manner what kinds of tokens might be covered.

27. *The Chair* noted that the PDAPL deliberately had chosen a definition which would comply with the most widely used commercial types of digital assets. A former member of the DAPL Working Group noted that "token" in the Scope Paper was interchangeable with DA in the PDAPL, whether or not linked to any other entity. DA would cover, for example, bitcoin, but also tokenised applications of real-world assets, with possible economic exposure, and any other element to which it could be linked. The PDAPL definition was functional and regarded the form and not the substance. The expert explained that a DA, within the definition, could either not be linked to another asset or could be linked (as a matter of applicable law) to another asset. The DA was thus like a piece of paper, which could be linked to an obligation or a claim by law: this hybrid asset (paper plus obligation) is a documentary intangible (such as a negotiable instrument, a bearer debt security, a share certificate). The obligation to which the paper (or the DA) is linked could be the subject of specific legal regulation (such as the law regulating securities), and that specific law would then govern the hybrid asset. In the same way that the private law governing a piece of paper continues to apply to a documentary intangible, the private law governing DAs would continue to apply to the hybrid asset, but the specific law governing the asset to which the DA is linked (eg the security) would be likely to be more important. From a conflict-of law angle, there are already rules governing the determination of the law applicable to the asset to which the DA is linked (eg the security). The determination of the applicable law to the hybrid asset (the 'linked asset') is within the scope of the Joint Project, and, while when considering the DA on its own, its function should not determine the applicable law, when that DA is linked to another asset, different considerations apply. For these reasons, the term "token" would still be embraced by the definition of DA.

28. Some experts also clarified that the notion of control in the PDAPL definition of DA was never meant as a reference to any specific legal term from common law jurisdictions. The notion of control in the PDAPL was meant to be functional and jurisdiction-neutral, as a transnational substitute for possession, as the most common ground among all civil and common law lawyers. Control in the PDAPL is a factual concept, that can have legal consequences, but it is different from the notion of control in any other legal system in particular. "Proprietary issues" being the primary concern, the idea was to achieve a definition that would clarify which entities could be the subject of proprietary rights.

#### *Economic value*

29. *The HCCH Deputy Secretary General* queried if, as raised by one of the experts, the issue whether economic value should be included in the definition of DA deserved discussion.

30. Most of the experts expressed the opinion that whether the DA had a stable or fluctuating value was a matter that fell outside the scope of the Project and should be left to the market. A former member of the DAPL Working Group recalled how this issue had been thoroughly discussed, with the policy decision not to add value as part of the definition, as a digital item might have no value at some point in time, but still it would not cease to be a digital asset in the sense of the PDAPL

(i.e., an item susceptible to being the subject of proprietary rights that can be linked to other entities, such as claims or rights). Another expert noted that many transactions were related to assets with no economic value, but might have a different value, such as a sentimental or other value.

31. As to the issue of technology neutrality, the experts agreed that any reference to a specific technology should be avoided to the maximum extent possible, including concerning the infrastructures on which DA work, such as platforms and distributed ledger technologies (DLTs). Some experts supported the view that a more specific approach might be needed and particularly a more granular definition of digital assets and tokens by reference to key features in connection with the types of transactions or legal situations that the final instrument would cover. One expert drew attention to whether the future instrument intended to cover the ecosystem that was being built in the “crypto space” (crypto-assets, cryptocurrency) and on the blockchain, especially on Ethereum (environmental, social and governance (ESG) and sustainability companies), or rather just the legal issues regarding digital securities. Thanks to blockchain technologies, proprietary rights – and thus markets – were also being developed in environments such as online gaming, which were previously consistently claiming that there was no property in the digital environment. Experts noted that striving for technology neutrality in the Project should not be taken to a point that would make the Project meaningless.<sup>1</sup>

#### *General discussion on applicable law and transactions*

32. *The Chair* recalled the need to move beyond the proprietary aspects of digital assets and discuss issues of law applicable to contractual aspects.

33. The experts mainly expressed the opinion that work on contractual aspects might be considered, as the crypto space was very dynamic in terms of transactions or transfers, but also cast some doubts on whether a digital asset transfer would truly imply special needs compared to an ordinary sale. As a general approach, what is new should be defined, and then the focus should exclusively be on that. There was no need to reinvent choice-of-law rules or any other rule just for the sake of it, but rather to focus on the new elements, specific to digital assets, that needed legal adaptation, without cutting across existing rules and existing principles, including the HCCH Principles on Choice of Law in International Commercial Contracts.

34. Some experts noted that useful work might be done on transactions in crypto-assets and in the area of smart contracts that might move digital assets, implying a transfer of property. In this case, there could be a need to know which law applied to that transfer or in case of wrongful appropriation by a smart contract. Some experts pointed to the specificity of platforms, i.e. when a party voluntarily joined a platform or took an action/made a transaction within a platform which was subject to certain protocols, or to smart contracts, and to what extent the choice of law that governed the initial transaction or was embedded in the system was valid and the chosen law might govern further transactions on the platform, since this deviated somewhat from ordinary behaviour in the non-digital world. The distinction was made regarding the transfer of DA in centralised and decentralised models. As to centralised models, the main issues were (i) whether there was a valid choice of law at the moment of joining the platform, and (ii) what the extent of the choice of law was in relation to transactions not concluded between the same parties (the user and the operators of the platforms) but rather between the user and other users within the platform. With regard to decentralised models (DLT), there would be merit in discussing the possibility that joining a DLT

---

<sup>1</sup> In an email dated 8th December 2023, experts from France that participated in the meeting stated their disagreement with the group’s view that any reference to a specific technology should be avoided. In their view: “(T)he excessively extensive definition of “digital assets” used in the UNIDROIT principles as an electronic record which is capable of being subject to control”, leads to a uniform treatment of a wide variety of assets ignoring their intrinsic different characteristics.”

model implied joining a multilateral agreement that would in turn regulate any kind of transaction within the system.

#### *Digital vulnerability*

35. The experts' views seemed to converge in that consumer protection was usually outside the mandate of an international uniform law instrument. However, transactions did change significantly when they occurred in the digital environment, and it might be reasonable to refer to the asymmetries that occurred in a digital environment when parties might be weaker because of the position they hold in the digital infrastructure itself. Traditional categories blurred in a digital environment, where it was not an issue of a business-to-business or business-to-consumer relationship, but rather of platforms versus users, and contracts were mainly non-negotiable. The assumption was that, in transactions concerning digital assets on large platforms, there could be an imbalance that might require specific attention. Several experts agreed that this imbalance might be captured by the reference to "digital vulnerability", while references to consumer protection might result inadequate. This was also reflected in the language of most recent EU law on platforms ("Digital Services Act"). Caution was expressed on the need to be up-to-date on the continuous changes occurring in the law of platforms around the world, especially as regards regulatory law.

36. *The HCCH Deputy Secretary General* recalled the relevance of original input from a group of experts from the United States, giving very concrete examples on how to go forward in relation to applicable law and transactions. The experts who conducted the research referred to the "transactions-based" methodology they used to test Principle 5 against the background of different types of transactions. They concluded that most proprietary issues were addressed within the scope of Principle 5, but some proprietary issues remained unanswered and might be augmented.

#### *Linked assets*

37. As to linked assets, some experts raised the issue whether, given the distinction between the electronic record (to be treated as an envelope) and linked assets, there could be the risk that the application of different laws to envelopes and real-world assets might bring about "digital inflation" (i.e., a critical situation with multiple digital assets linked to a single underlying asset).

38. Experts agreed that it would be ideal if, in many situations, choice-of-law rules resulted in applying the same rules to both the envelope and the content in the envelope. However, there were cases, more often than one might think, where the envelope could be governed by a different law than the content thereof. One expert referred to the examples of (i) a stable coin that represented a portfolio of different currencies, each currency governed by different laws, or (ii) a token representing a number of claims governed by different laws. In these cases, it would make sense to submit a token to a different law (as provided, e.g., by article 145A of the Swiss code of private international law). Many experts pointed out that it was not possible to harmonise the rule as to what law governed proprietary interests in movables, immovables, intellectual property, rights to payment, tangibles and intangibles, or different types of property, and that having one choice-of-law rule for all types of linked assets would be an endeavour doomed to fail. Instead, it would be reasonable to examine different types of "linked asset transactions", such as when the linked asset was an intellectual property right, a receivable, a physical commodity such as gold, or immovable property such as land. The group might try to identify a framework of principles on choice of law for each of those types of property, taking their specificities into account.

39. Experts, including former members of the DAPL Working Group, agreed that this was a key point that the Project could address: the designation of the law that identified the digital asset (envelope) and the linked asset (the content of the envelope), whether the envelope really existed, and the nature of the link itself. It was clarified in this regard that the PDAPL had not covered the very existence and nature of the link. One expert also expressed the opinion that it was beyond the

scope of the Project to define whether links were strong or ineffective, or if the NFT and the linked entity circulated together or not; rather, the aim was to decide the law prescribing the nature and strength of the link.

40. Some experts pointed out that in French law there was no notion of a second asset, but only the one under the linked asset – the French judicial system only looked at it as one single asset. While the distinction between a DA and a linked asset was clear when an asset was issued on a blockchain, it would be less clear when it regarded assets such as cryptocurrencies, bitcoins, stable coins, and NFTs, and the distinction between the security and the right in the security, particularly in the case where a security was entitled to an account and the registration or entitlement to that account might be subject to a different law than that for the underlying security.

41. One expert clarified that, in this case, the registered ownership would depend on the law governing the issuer, but the security entitlement between the depository and the broker would depend on the choice of law in such an agreement, and the entitlement between the broker and the investor would depend on the law chosen on that account. More generally, different bodies of law might govern the DA and the linked asset, and this was the reason why the PDAPL considered one simple set of rules for the DA and then referred to other law. With regard to securities, if the national law prescribed that the security was one single unified asset (or not), it did not really functionally matter because once the law governing the security provided that it was embodied in that digital asset, the result was the same.

42. It was also explained that, with reference to tokens and tokenisation, there was a need to distinguish between a token and an asset (or any reference falling between the two); thus, by implication, the asset could not be a token. A token that represented real estate could be governed by the law of the country where the immovable was located; in other cases, the two might be dissociated. The proprietary law that governed a certain asset should allow this, as tokenisation needed to be open to the possibility of linking tokens to further entities which were conceived under other law.

43. With regard to the risk of “digital inflation”, one expert expressed the opinion that property or commercial law would never be able to avoid the duplication of assets, as once that the asset was issued and circulated between countries, it would be impossible to say which legal order would have the last say with the ultimate person holding the asset. It was a regulatory problem and not a private law issue. Property law was only one means to prevent digital inflation, but it would not work insofar as there could be conflicting properties. Therefore, the answer was to opt for strict standards of regulatory law, and if regulation also failed, then to refer to courts to find a solution and/or distribute the losses.

44. One expert pointed out that, in France, there was a solution as to linking digital assets to securities, while in England there was still debate on whether a share or an equity security could be successfully linked with a digital asset. This was why there was a need to know what law applied to the link (and know whether it was effective). This should be done for a large number of different situations outside the securities context. An example to clarify could be an NFT that purported to be linked to the Mona Lisa in France. The link would evidently not be effective, but in order to arrive at that conclusion, it would be necessary to assess it under the relevant applicable law.

45. *The Chair* recalled that linked assets still needed discussion and adjourned the session for the day.

#### *Contractual aspects*

46. Since the Joint Project commenced as a continuation of the PDAPL, which provided guidelines on proprietary matters related to digital assets, a discussion was held on the desirability of expanding

the scope of the Joint Project and including work on contractual matters. Experts discussed whether the Project should: (i) include considerations related to the applicable law rules in contractual aspects in transactions of digital assets; (ii) cover other matters, such as transfer of ownership, succession and tortious issues; and (iii) include issues related to consumers.

47. Experts noted that the content of the discussion would depend on the nature of the future instrument of the Joint Project. Some experts supported the expansion of the discussion to cover contracts other than the custody agreement. *The Chair* clarified that if a soft-law instrument were to be undertaken, the content of the analysis might need to be substantially increased, since, amongst other objectives, soft-law instruments sought to provide guidance, and this could be achieved not only by stating what was relevant and why, but also by explaining why a specific topic did not need to be covered, or how the existing rules would apply. For instance, it would be necessary to provide guidance on why ordinary contract principles would or would not apply to contracts, such as smart contracts, related to digital assets. Experts noted that a hard-law instrument would require more political support and would probably not consider all the contractual aspects.

48. Regarding consumer protection, experts outlined the difficulties in distinguishing between business-to-business cases and transactions that were traditionally covered by consumer transaction. Experts noted that the exercise of delineating what was a consumer transaction and who was a consumer would be challenging. It was pointed out that covering consumer transactions would also require reaching consensus on consumer rules, especially in the case of a hard-law instrument. Some experts recalled that other international instruments, such as the Hague Principles on Choice of Law in International Commercial Contracts, chose not to cover consumer transactions because of those difficulties. Some experts also suggested that the discussion not immediately be limited to business-to-business situations, as some systems enabled peer-to-peer transactions and directly involved consumers. Many experts agreed that there was no need for separate rules for consumers and suggested to apply the rules to both business-to-business and consumer transactions, in order to provide more certainty and achieve a uniform approach.

49. The discussion then shifted to the transfer of ownership and the applicable law.

50. One expert pointed out the necessity of distinguishing between substantive law and choice of law. It was noted that substantive law, referred to as "other law" in the PDAPL, covered issues of transfer of proprietary rights (Principle 3(3)), while choice of law was discussed in Principle 5, which covered proprietary issues.

51. One expert noted the importance of addressing the close relationship, and difference between, a contract and the question of whether there had been a transfer. Experts noted that whether a contract was transferring property or not would be a proprietary issue rather than a contractual one, despite the strong dependence upon the contract.

52. Some experts supported the inclusion of transfer with proprietary effects, such as transfer of ownership, noting the importance of not affecting or touching upon the proprietary effect itself.

53. In relation to transfers, one expert noted that including succession (or not) would depend on the type of transactions to be covered in the Joint Project. Focusing on transfers naturally led to having to include considerations relating to succession; in contrast, if the focus were on economic activities and commercial transactions, succession would be excluded, in line with the traditional distinction between commercial and other types of transactions that were more related to family law or succession. It was further noted that commercial transactions were mostly related to purpose and it was possible to sell an asset which had no value or had a fluctuating value, such that the final value of the asset would not be known either before or after the transaction. In light of this, it was noted that the earlier discussion at the present meeting had come to the conclusion that the element of economic value did not need to be added to the definition of digital assets.

54. The discussion moved on to tortious issues. Linked with the issues on contractual aspects, many experts agreed on the relevance of work on applicable law to proprietary and contractual torts. Experts highlighted the importance of including the proprietary aspect, as it would cover cases of claiming property in torts, and the contractual aspect because of the difficulties in distinguishing between proprietary and contractual aspects.

55. Experts pointed out the challenges related to characterisation, noting that contractual issues in one jurisdiction could be considered tortious issues in another jurisdiction; for instance, hacking accounts to steal assets might be classified as a tort in some jurisdictions. It was accordingly proposed to adopt a functional delineation and exclude tortious issues relating to injuries to person or property, similar to the text of the UN Convention on Contracts for the International Sale of Goods (CISG).

56. Experts questioned whether the scope of the Joint Project should include liability and damages as a consequence of a transaction with or without an economic component. The example provided was the transfer of digital assets such as NFTs and avatars which contained malware and caused damages. Most experts agreed on adopting a narrow approach by limiting tort coverage to proprietary and contractual matters and excluding personal liability and personal damage issues. One expert noted that tortious issues, including damages, which resulted in economic loss would merit consideration, as it would not be covered under the general issues of tort. The example given was negligence in the code of smart contracts, as happened in the DAO incident in 2016. Participants agreed on excluding cybersecurity and criminal issues, which were excluded from the HCCH's mandate and would fall outside of the scope of the Joint Project.

57. In closing the discussion on contractual aspects, *the Chair* outlined that there was support to include work on contractual issues, as well as on tortious matters which were adjacent to contractual and proprietary matters. The Chair remarked that there were concerns on the delineation of tortious issues, in particular on whether to cover general liability and personal damages, and noted that the example of damages caused by malware in a digital asset would be useful to establish clear boundaries.

#### *Applicable law: substantive matters (linked assets, digital twins, novel assets)*

58. With reference to applicable law and substantive matters, experts were invited to consider issues related to linked assets, digital twins and connecting factors. *The HCCH Deputy Secretary General* queried whether the contractual, proprietary, and tortious issues would refer specifically to digital assets as a whole, to linked assets, or to a subset of linked assets. The responses varied for the different categories of issues. Some experts commented that linked assets were discrete as they required determining the law applicable to the link. On the contrary, contractual or tortious matters would apply equally to both linked and unlinked assets.

59. Clarification was sought as to the difference between a digital twin and a linked asset. Many experts noted that the difference between digital twins and linked assets lay in representation of the asset and the different rights embedded. While linked assets embedded an interest or a right and represented a value or an asset, digital twins were mimicking and equivalent representations of assets in a virtual world. It was further noted that the type of representation had certain implications, especially in the context of transfer; in particular, whether a transfer in the virtual world would follow the same rules of transfer that were used in the physical world. The importance of transferability was pointed out, noting that non-transferability in the virtual world would not disqualify the asset from being a digital twin.

60. Some experts remarked that the same question would arise, and the same rules would apply to both linked assets and digital twins. Issues related to digital twins and triplets could be explained

with existing concepts. One noted that “replicas” did not consist of novel elements which merited a new approach to legal solutions; the existing rules would suffice.

61. Regarding the definition of digital twins, one expert noted that digital versions could not be called digital twins because modifying the digital version did not instantaneously change the real asset. Some experts remarked that the term “digital twin” was not a legal concept and did not correspond to definitions accepted in the blockchain context but rather was used in the immersive online world. Examples were made of the metaverse creating replicas of real-world assets and of the blockchain version of a university degree. Some experts also noted that linked assets differed in that they referred to real-world assets; an example of linked asset was a digital asset linked to a painting and giving rights to it.

62. One expert remarked that the discussion was on choice of law and choice of law in relation to whether a link existed – and whether it was effective or not. It was noted that the link could take different forms; it could be a transfer of the real-world asset, or it could be another (ineffective) type of link – for example, a stablecoin linked to the reserve, held without embedding any property rights in it. It would therefore be necessary to look at the question of choice of law in order to decide both the existence and the nature of that link, as what needed to be decided was whether the Project would limit its investigation of the choice-of-law rule to the location of a digital asset.

63. In the context of digital twins, it was queried whether it was desirable to extend the scope of the choice of law for the link to non-digital assets. Regarding the scope, many experts suggested removing the concept of digital twins from the scope of the Project, while some experts suggested to include it only to the extent that the assets were digital assets or linked assets.

64. *The HCCH Deputy Secretary General* noted that eliminating digital twins from the scope of the Project could be done, if the experts agreed that it was necessary. She noted that digital twins were digital replicas of real-world assets but were not necessarily linked to real-world assets. She queried whether “digital triplets”, as the real-world data stream in relation to both the real-world asset and the digital twin, would merit consideration in the Joint Project. She added that, in the context of digital twins and triplets, there were already several instances of arbitration claims dealing with contractual aspects, such as contractual fraud, as well as with the issues of when a link between the two virtual assets existed and what would be the applicable law.

65. The discussion highlighted the differences in definitions and characterisation. To facilitate characterisation of, among other things, linked assets, digital twins and digital triplets, it was agreed that more definitional work should be undertaken. It was further supported not to limit the discussions to external definitions and labels but rather examine the issues carefully and openly and consider providing new or different definitions.

66. Regarding linked assets, it was suggested to be agnostic as to the kind of linked asset. Some experts supported the view of excluding transfer of real-world assets that conferred interests in digital assets.

67. *The Chair* pointed out the importance of limiting the scope to digital issues, as this was in line with the material scope of the PDAPL but explored issues beyond proprietary aspects. He further noted that the mere fact that existing laws would already cover the issues did not justify an exclusion. He added that the Joint Project should consider providing guidance as to how digital assets fit into existing legal rules and why a specific rule was not required.

68. The discussion moved to the connecting factors, and experts were invited to express their views by distinguishing between linked assets and non-linked assets. Experts noted that the relevant question was why the digital environment required different treatment and different applicable law as opposed to the non-digital environment. It was suggested to start with basic scenarios and explore

whether and why the current PDAPL would not apply to situations involving linked assets, and then to explore whether more connecting factors were needed and identify the connecting factors based on the type of assets and the link.

69. *The HCCH Deputy Secretary General* queried as to what the connecting factors would have been in relation to the link between two virtual assets. Experts stressed the importance of addressing the question of applicable law to determine (i) whether a legal – rather than factual – link existed between the digital asset and the asset to which it purported to be linked, and (ii) how strong or weak the link was in terms of whether the purportedly linked asset would follow the primary asset, for example in case of transfer. It was added that, in relation to linked assets, it was necessary to first focus on what the applicable law would govern and, in particular, on whether the transfer of control of the underlying digital asset would “carry” or otherwise affect the proprietary rights of the linked asset.

70. Some experts observed that Principle 5 could constitute a good starting point for the consideration of the connecting factors but pointed out the necessity of adding more connecting factors to the fallback rule to better reflect the digital reality. One expert proposed to consider five possible connecting factors: (i) type and function of the digital asset; (ii) existence and type of link; (iii) “subjective” scope (parties involved, including business-to-business and consumers); (iv) the location where control over the digital asset was asserted; and (v) where the digital asset was stored.

71. One expert suggested to distinguish connecting factors based on whether they applied to consumers, considering that many jurisdictions adopted a different approach between business-to-business and business-to-consumer transactions and often did not allow for a choice of law where consumers were involved. It was noted that, for policy reasons, it was important to explore to what extent it would be possible to allow for a choice of law, especially in relation to the link. The expert added that this would have the following matrix structure: (i) the quality of the parties, first focusing on business-to-business situations and then considering policy issues and situations of consumer protection where weaker parties were involved, and (ii) the connecting factors based on the different scenarios and types of assets. This proposition was supported by some other experts.

72. To the contrary, another expert suggested to distinguish based on the condition of the assets themselves, specifically on the underlying assets, rather than on the condition of the parties.

73. Many experts further suggested to address the different levels of party autonomy and the connecting factors by dividing linked assets into subcategories. This was reflected in the response submitted from a U.S. perspective to the iterated Scope Paper, which identified land, goods, intellectual property and receivables as four different types of linked assets requiring special considerations. It was noted that especially for land, overriding mandatory rules would limit party autonomy. This analysis found support, and it was further suggested to add more assets to that list. One expert remarked the importance of also considering the *lex satus*, which would not always allow a transfer of real-world assets, such as land, by merely transferring the digital asset.

74. Experts noted that consumer law was a policy issue protected by legislators. *The Chair* noted that, despite the fact that, as a regulatory matter, it would fall outside the scope of this Project, it was still necessary to determine applicable law in related matters.

75. One expert expressed the view that the law applicable to the link would benefit from a hard-law convention, which would provide legal certainty to third parties involved. *The HCCH Deputy Secretary General* noted that, based on historical experience at the HCCH, a hard-law instrument would be effective but noted that the form of the future instrument of this Joint Project was undecided at this stage. *The Chair* added that hard-law instruments required strong political support. One expert suggested to consider providing an analysis on the advantages and disadvantages of hard-law and soft-law instruments for this specific Project.

76. *The Chair* noted that there seemed to be consensus on the desirability of conducting extensive work on “linked assets”, which were not defined in the PDAPL or considered in Principle 5, and that the consideration of this topic would need to be granular, divided into different parts depending on the list of factors described above.

77. The discussion then moved on to consider connecting factors for digital assets as a whole, focusing on Principle 5. It was highlighted that Principle 5 offered certainty in two ways: (i) it provided ex-ante certainty to parties involved, in that the parties would know what rule or law would apply in relation to proprietary issues; and (ii) it offered certainty in disputes, as it provided courts with a reference tool. It was further noted that the PDAPL Commentary recognised that a conflict-of-law rule would always be imperfect.

78. With regard to the “waterfall” approach in Principle 5, experts from Brazil expressed their reservations. They noted that, although Principle 5 was a good starting point, its incorporation by legislators and application by courts might pose challenges. They outlined that most civil law countries and private international law instruments, such as the Rome Convention and the Rome I Regulation on the law applicable to contractual obligations, adopted cumulative rather than cascade approaches for connecting factors. They further noted that the cascade approach did not contain stable connecting factors and therefore would not lead to predictable results and legal certainty in complex cross-border situations involving digital assets, as it rendered it difficult to understand how one rule would step in for another rule. Concerns were expressed particularly as to whether the absence of stable objective connecting factors would be conflicting and overlapping with the overriding mandatory rules of the forum. They referenced the Brazilian regulatory framework which, although limiting party autonomy in choosing the applicable law related to transactions that involve securities, was not applicable to cross-border transactions. Instead, it was limited to transactions involving Brazilian securities markets or parties located in Brazil. Therefore, party autonomy would not be harmful. In light of this, they pointed out the necessity of conducting more work on this matter, possibly in a hard-law instrument which would establish overriding mandatory rules of the forum and would clearly provide for a hierarchy of rules in a legal system.

79. Many experts responded by stressing that cascade approaches were adopted in different private international law instruments, including the Rome Convention and the Hague Securities Convention, and did not seem to raise issues in their application in civil law countries other than Brazil. *The Chair* added that the drafting and consultation of the PDAPL had not received any negative comments as to the methodology using a waterfall structure, to the extent that the different steps were clear, and there was a precise hierarchy. He further noted that the PDAPL were conceived to be incorporated as law within a State and therefore would not contradict other laws of the State.

80. Turning to the connecting factors, the participants expressed their views on the possibility of adding connecting factors and the format that this would take.

81. With regard to Principle 5, concerns were raised with regard to regulatory aspects, especially in case the outcome of the future instrument of the Joint Project was intended to be hard law.

82. Some experts expressed concerns on the first two connecting factors of Principle 5 on the basis that they left a margin to the actors to obviate the regulatory law. Using the FTX case as an illustration, it was stressed that concerns arose not when an entity provided services related to digital assets to residents in the same country where it was regulated, but mainly in cases an unregulated entity operated in another country without any authorisation. It was clarified that the main concern from the French perspective regarded forum shopping and the fact that some issuers or other intermediaries could choose the applicable law. The example of an entity incorporated in State A, operating in State B and choosing the applicable law of State C, was presented to support this view.

83. Many experts highlighted that the PDAPL, and in particular Principle 5, were limited to private law, in particular to proprietary issues, such as issues of ownership and transfer of ownership of the digital asset, and did not interfere with regulatory law. However, experts from France stressed that the term “proprietary” was perceived under French law as encompassing public aspects, touching upon regulatory issues. Although the conflict-of-law rule applied to proprietary issues, it produced effects upon third parties and could raise issues of regulatory arbitrage. In addition, some experts had concerns as to what would be the law applicable to contractual issues between investors from different countries who transferred digital assets through a custodian. It was noted that the order of the connecting factors of the waterfall would still be followed. It was further suggested to elaborate on the concept of “proprietary issues” and clarify what counted as proprietary issues, to avoid interpretations that could undermine a state’s ability to regulate in protection of certain weaker parties.

84. In relation to the regulatory concerns, some experts debated the level of protection of investors/clients in comparison to other assets such as shares of stock purchased from a seller located in one country through an intermediary (such as a securities brokerage firm) based in another country. The experts who expressed regulatory concerns commented that the digital asset market was new compared to other businesses, such as in the banking sector or e-commerce. They added that, in light of the technology, lack of experience and lack of regulation, the risk and the propensity for harm were higher. One expert took a different view and explained that the situation was similar to e-commerce with consumer goods, or to the banking industry, which became more regulated over time.

85. One expert pointed out that these regulatory concerns regarded regulatory arbitrage, not forum shopping. He confirmed that choice of law in a contractual relationship might pose issues for consumer protection in certain jurisdictions. Some experts added that the best way of addressing such issues was to place them under control by creating levels of protection similar to the UNIDROIT Convention on Substantive Rules for Intermediated Securities (“Geneva Convention”) or EU harmonisation practices. The example of the U.S. perspective was referenced, in that it focuses on strong, protective good-faith purchase and take-free protection for the purchaser, leading to a race to the top to choose a law with the highest protective levels for investors. It was noted that this approach would benefit issuers: higher levels of protection of investors’ proprietary rights would mean more incentives for investors to acquire.

86. Another expert reflected upon the differences between transfers of assets in regulated markets and transfers in unregulated markets. By referencing the recent cases of Binance and Coinbase and the proceedings brought against them by the U.S. Securities and Exchange Commission, it was noted that whether or not a digital asset was regulated (for example, by way of a financial regulation) was key in the discussion and could generate different results.

87. Some experts suggested to address the regulatory concerns in an expanded commentary, clarifying the boundaries between regulatory and proprietary issues and pointing out that the exercise of regulatory control and any overriding mandatory provisions would not be affected by the text of the Principles. It was noted, though, that clear reference already existed in Principle 5. The Chair specified that Principle 5(20) envisaged that, in case of a regulated custodian, the regulatory authorities may wish to restrict a custodian’s choice of law for the custody agreement or other issues.

88. In light of the concerns raised on regulatory arbitrage and forum shopping, *the Chair* confirmed such challenges in the realm of linked assets and financial instruments, especially in relation to weak party protection issues which would be linked with regulatory arbitrage. He pointed out that addressing them was one of the objectives of the Joint Project. He clarified that the PDAPL were a soft-law instrument and served as a guide or proposal for adoption by legislators. Nothing prevented regulatory laws from limiting the use of the Principles, or legislators from partially incorporating the Principles with an exception for specific transactions or with a caveat for regulation.

The commentary could be further developed by elaborating on regulatory protection in relation to the interpretation of Principle 5.

89. *The Chair and the HCCH Deputy Secretary General* reiterated that the final outcome of this Joint Project was not clear at this stage. The Chair noted that the initial objective was to work on completing the existing framework, not necessarily making Principle 5 part of any future instrument. *The HCCH Deputy Secretary General* added that the HCCH does not have the mandate to amend or revise the PDAPL, including its Commentary, and noted that the discussion would instead entail an augmentation building upon Principle 5.

90. One expert expressed reservations as to whether there was a necessity of augmenting the list of factors in Principle 5. It was highlighted that legal certainty, predictability, and transparency would be more effectively achieved through a small number of factors rather than by identifying and including every conceptually relevant connecting factor.

91. However, most experts supported the view that the introduction of multiple connecting factors would provide more guidance. As to the connecting factors, experts highlighted (i) the difficulties in finding connecting factors that were sufficiently relevant and could be ascertained ex ante, and (ii) if there was a choice of law, who would decide what the choice of law was, and how it would be consented to by the users. It was pointed out that these complexities were exacerbated in decentralised systems.

92. The list of five possible connecting factors was discussed for digital assets as a whole. Some experts queried whether the list envisaged an order of priority among the connecting factors. It was stressed that it was not clear whether the location of control was the closest or most important connecting factor, but it was suggested to consider an order by taking into account (i) the nature of the digital asset, (ii) the existence and type of link, and (iii) the type of linked asset.

93. One expert noted that the location where the digital asset was stored might be of use, especially when the asset was not based on a DLT system. Many experts expressed concerns for fictionalised sites, such as the location of a digital asset, due to the difficulties in ascertaining applicable law in cases of distributed ledgers across the globe. Specifically for the use of the storage location, it was stressed that the connecting factor could easily be evaded by changing the storage location and consequently the applicable law. It was noted that, in light of practical and legal challenges, the practice of designing regulations and directives on electronic commerce in the European Union had systematically rejected the idea of the technological devices used for storing the information, including cloud-based systems.

94. Many experts recommended using the location of the person in control of the DA, despite the inherent difficulties and nuances of the concept of location. Consistent with the system of digital assets, control was considered to be a factual link and therefore the most coherent place to locate the digital asset. Similar to assignments of receivables, the concept of "location" could include the principal place of business, chief executive office, domicile, place of incorporation, real seat, etc. In the case of multiple parties in control, it was suggested to resort to the bottom of the waterfall or to the closest connection.

95. Some experts supported the view that, for the entities falling within a regulation, the location of the regulated entity or the jurisdiction that imposed that regulation could constitute a connecting factor. This could promote smooth interaction between the applicable commercial law and the applicable regulatory law. It was pointed out that the place of establishment of regulated entities would be consistent with the market structure and would increase certainty in relation to the parties involved. The parties would be in a position to know in advance the person or entity participating in the market, which would be held responsible. One expert noted that this suggestion could overlap

with Principle 5(1)(c) in case of a regulated issuer. Another expert opposed this by noting that focus on the parties would not be appropriate for proprietary issues.

96. *The Chair* queried whether expert envisaged an order of priority between the connecting factors of the location of control and location of the regulated entity, in case there was an entity involved but there was no applicable regulation. One expert stressed that these connecting factors would apply in different cases. Another expert suggested that the ranking of the connecting factors should not changeable at the will of the parties, in order to preserve predictability.

97. Some of the experts suggested that the Joint Project should continue in order to allow the experts to reflect on how any additional factors would fit into Principle 5. One expert suggested to introduce new connecting factors before or after Principle 5 (1)(c). Some expert emphasised that the policy decisions made in the drafting of Principle 5 should not be changed. These experts therefore suggested that further criteria and connecting factors be added only to the bottom of the waterfall, which envisaged the private international law rules of the forum and thus were not drafted in the light of a policy decision.

98. Other experts were in favour of either adding commentary to the existing PDAPL, or potentially revising the existing Commentary in the future, should the technological developments require so. Many experts recognised the advantages of hard-law instruments, especially their position and hierarchy in a legal system, but others highlighted the high risks of failure.

99. *The Chair* clarified that the PDAPL were a UNIDROIT instrument recently approved by the UNIDROIT Governing Council and were not intended to be amended. Besides, the instrument had already received strong support from many countries. He clarified that, subject to the approval of the UNIDROIT Governing Council, Principle 5 could only be enhanced, for example by further developing the Commentary, or adding criteria to the bottom of the waterfall, while maintaining the policy choices.

100. In light of quick technological developments, experts observed a gap in Principle 5 in relation to decentralised finance (DeFi) issues and suggested to conduct work to supplement it. Specifically, it was noted that the waterfall did not provide a solution in decentralised systems, such as those built on Ethereum, because of the absence of a bilateral legal relationship between the operator and the user. Experts addressed the example of MakerDAO issuing DAI stablecoins and noted that MakerDAO had no legal entity and could not be considered a “legal” issuer for the purposes of the connecting factors of Principle 5. It was noted that such cases would also create problems in the application of Principle 5(1)(b) because if digital assets with no issuer were traded on an exchange, the exchange could be considered a system under Principle 5(1)(b). In the same vein, it was stressed that the connecting factors related to control and location, as listed earlier, might not be useful for DeFi.

101. *The HCCH Deputy Secretary General* suggested to undertake a mapping exercise of all the missing connecting factors that might be considered, including the location of regulatory authority, which was proposed during the meeting. She added that this should not be specifically about DeFi but should broadly include permissionless distributed systems in general. She then referred to preliminary document that had been prepared by the Permanent Bureau of the HCCH in 2020, which contained an overview of connecting factors and which could prove to be a useful tool in the exercise.

#### *Jurisdiction, recognition and enforcement*

102. Opening the discussion on jurisdiction, recognition and enforcement, *the Chair and the HCCH Deputy Secretary General* clarified that the Joint Project should cover the issues only to the extent necessary to complement issues of applicable law. It was further noted that any solution should be coordinated with existing and parallel works of the HCCH, UNIDROIT and other organisations,

particularly UNCITRAL. Special reference was made to the UNIDROIT Project on Best Practices of Effective Enforcement, the HCCH Jurisdiction Project and UNCITRAL's work on asset-tracing and applicable law matters for insolvency.

103. Regarding jurisdiction, one expert stressed that excluding it from the scope of the Joint Project could result in the situation that courts would automatically apply the domestic law. *The HCCH Deputy Secretary General* appreciated this comment and noted that jurisdiction was within the mandate of the HCCH and that, if the experts of this Joint Project considered it important, and if it did not fall within the scope of other existing projects, the Permanent Bureau of the HCCH would take the matter forward and would seek approval for a mandate to include it in either this Joint Project or a new one.

104. Some experts followed up on this and highlighted the importance of exploring issues related to jurisdiction. In light of several proprietary issues which had emerged in cases of insolvency, fraud or hacking of intermediaries, where the courts had doubts on the connecting factors for the jurisdiction, further work on jurisdiction was considered necessary. It was suggested to achieve this through commentary. *The Chair* supported this position and added that the HCCH could then go beyond the commentary, and potentially and separately produce a hard-law instrument, if deemed necessary.

105. Other experts observed that a disconnect might occur between jurisdiction and choice-of-law issues, especially in relation to specific connecting factors such as the location of the person in control against whom the claim would be brought. In the context of claiming ownership on a digital asset, the idea of the person in control could lead to unpredictable results.

106. The discussion turned to the situation of public blockchains where no issuers existed, nor any entities with legal personality. *The Chair* shared this concern and queried on how to deal with asset tracing in those cases. Experts identified two main challenges in relation to jurisdiction and enforcement: (i) identifying against whom to start legal proceedings and (ii) how to enforce against unknown persons or entities, considering the difficulties in re-obtaining control. *The HCCH Deputy Secretary General* referenced the HCCH 1965 Service Convention, which could be a useful tool in considering the first issue. She noted that the matter of reaching the digital assets was considered to be more challenging because of the regulatory mechanisms, as opposed to the distributed ledger systems which are not intended to be interfered with. For policy reasons, she recommended putting forward frameworks which could be enforced in a distributed system.

107. Regarding recognition issues, one expert noted the situation where a jurisdiction did not recognise an order to re-possess a digital asset because that asset was not considered an asset in another jurisdiction and therefore was not susceptible to being re-possessed.

#### *Summary and additional discussion*

108. *The Chair* drew some preliminary conclusions. While opinions varied as to the respective advantages and disadvantages of soft-law instruments as opposed to a hard-law instruments, it was clear that the form of the instrument would considerably impact on its content, with a need for much more explanation in the case of a soft-law instrument. In any event, it was clearly stated that there was no need for to reach consensus on the form of the output of the Joint Project at this stage. There was consensus in the room about the desirability of doing work on applicable law and linked assets, including by defining connectors to identify the law applicable to the link. Doubts were raised about the desirability of doing work on contractual matters, except where they related to aspects that were peculiar to DA and their use in the digital economy, in particular as regards issues of smart contracts, automated contracts, expression of consent on digital platforms, and distributed ledgers.

109. One expert pointed out that the Project should leave space for different speeds, depending on the areas of work, as well as elaborate on the role of conflicts of law, but also consider that there were moving targets that would not yet solidify in the next few years. Another expert reminded the group that there was enough support among the experts to consider contractual aspects and assess the application of existing rules when very specific aspects came into play that were connected to digital asset transactions (decentralisation, difficulty to recognise the parties), connecting factors (location of the DA or location of the person in control), choice of law and party autonomy (choice of law coded into a smart contract, joining a platform and valid choice of law, effects on third parties). *The HCCH Deputy Secretary General* noted, in this regard, that UNCITRAL was doing work on smart contracts.

110. The point was made that the group should work in a first phase on business-to-business transactions and, in a second phase, look at the consequences of a transaction occurring with consumers or with SMEs, i.e. in a context of economic dependency or asymmetry. The concept of "digital vulnerability" was recalled, as a subset of "weaker party protection".

111. *The Chair* added that he found support to deal with tortious issues, limiting the attention to property and contractual torts, as requested by the specificities of the DA context, and for seeking more granularity in the definitions. As to the definition of tokens, some experts agreed that the notion would fall within the definition of DA as possible objects of proprietary rights under the PDAPL, and they could be defined as a subset of DA. It was proposed to examine a mechanism for the constant updating of the definitions in the future instrument, in order to capture the evolving technological landscape, even though this might result in being burdensome, based on the Institute's experience.

#### **Item 4 on the Agenda: Organisation of future work**

112. *The Chair* declared closed the discussion on the iterated Scope Paper and proposed to discuss item 4 on the Agenda. He confirmed that, as a next step, the summary conclusions of the meeting would be drafted based on the three days' discussion, and later circulated for revision and approval. The Chair also read a proposal by an expert to organise intersessional work of three or four small working groups of two or three people that would undertake some preliminary work to advance the project and provide feedback and input to the documents that had to be presented to the organisations' respective governing bodies. In the alternative, it was proposed to proceed with individual written comments. After some discussion, the experts decided to postpone intersessional work until the future mandate and scope of the Joint Project were clarified.

#### **Item 5 on the Agenda: Any other business**

113. No other issues were brought to the *Chair's* attention.

#### **Item 6 on the Agenda: Closing of the meeting**

114. *The Chair* closed the meeting at 11.50 CEST on 4 October 2023.

**ANNEXE I**

**AGENDA**

1. Opening of the meeting and welcoming remarks by the UNIDROIT Secretary-General and the HCCH Deputy Secretary General
2. Adoption of the agenda and organisation of the sessions
3. Consideration of substantive issues (Study LXXXIIA – P.M.2 – Doc. 2)
4. Organisation of future work
5. Any other business
6. Closing of the meeting

**ANNEXE II****LIST OF PARTICIPANTS****EXPERTS**

Mr Juliano ALVES PINTO <i>(excused)</i>	First Secretary Head of the Division for International Juridical Cooperation Ministry of Foreign Affairs of Brazil
Mr Phoebus ATHANASSIOU <i>(excused)</i>	Principal Legal Counsel European Central Bank
Mr Rodolphe BAROUKH	Treasury of France
Ms Teresa BARREIRA <i>(remotely)</i>	Senior Counsel Office of the General Counsel Hong Kong Monetary Authority
Mr Antony BEAVES <i>(remotely)</i>	Senior Legal Counsel Financial Stability Division Bank of England
Ms Priscille de CAMBOURG	Ministry of Justice of France
Mr Neil COHEN <i>(remotely)</i>	Professor of Law Brooklyn Law School
Mr Thiebald CREMERS <i>(remotely)</i>	Chief Legal Officer AMAFI (France)
Mr Marek DUBOVEC <i>(excused)</i>	Director of Law Reform Programs International Law Institute
Mr Alberto de FRANCESCHI <i>(excused)</i>	Ministry of Justice of Italy
Ms Yaira FRANKEL-SCHROEDER <i>(excused)</i>	Director of Financial Regulation Department of Economic Law Ministry of Justice of Israel

Mr Julien GOLDSZLAGIER <i>(remotely)</i>	Mission Manager Business Law Division Ministry of Justice of France
Ms Louise GULLIFER <i>(remotely)</i>	Rouse Ball Professor of English Law University of Cambridge Fellow of Gonville and Caius College
Mr Matthias HAENTJENS <i>(remotely)</i>	Professor of Civil Law Leiden University
Mr Hideki KANDA <i>(remotely)</i>	Professor of Law Gakushuin University
Mr Matthias LEHMANN	Professor Of Private Law, Private International Law and Comparative Law University Of Vienna
Ms Yaara LEMBERGER-KENAR <i>(excused)</i>	Acting Senior Director Department of Civil Law Ministry of Justice of Israel
Mr Josué Roberto LIÉVANO PAZ <i>(remotely)</i>	Minister Counsellor Embassy of the Republic of El Salvador to the Netherlands
Ms Hannah Yee-Fen LIM	Associate Professor of Business Law Nanyang Technological University
Mr Klaus LOEBER <i>(remotely)</i>	Chair of the CCP Supervisory Committee European Securities and Markets Authority (ESMA)
Mr Timothy MALONEY <i>(excused)</i>	Head of Settlement and FMI Innovation Securities and Markets Team HM Treasury (United Kingdom)
Mr Thomas MAYER <i>(excused)</i>	Senior Legal Adviser Private International Law Unit Federal Office of Justice (Switzerland)
Mr Charles MOONEY	Charles A. Heimbold, Jr. Professor of Law Emeritus

Mr Tetsuo MORISHITA <i>(remotely)</i>	University of Pennsylvania School of Law Vice President for Global Academic Affairs Professor of Law Sophia University
Mr Christopher ODINET	Josephine R. Witte Professor of Law The University of Iowa College of Law
Mr Sebastian OMLOR	Professor of Civil Law, Commercial and Business Law, Banking Law and Comparative Law Philipps-Universität Marburg
Mr Philipp PAECH	Associate Professor of Financial Regulation London School of Economics
Mr Fabrício PASQUOT POLIDO <i>(remotely)</i>	Associate Professor of Private International Law, Comparative Law and New Technologies University of Minas Gerais – UFMG
Ms Sandra ROCKS <i>(excused)</i>	Counsel Emeritus Cleary Gottlieb Steen & Hamilton LLP
Ms Teresa RODRÍGUEZ DE LAS HERAS BALLELL	Co-Reporter ELI Access to Digital Assets Project
Ms Cayetana SANTOLALLA	Associate Professor of Private International Law University of Navarra
Mr Clément SAUDO <i>(remotely)</i>	Legal Affairs Director Deputee Financial Markets Authority of France
Ms Elsabé van der SIJDE <i>(remotely)</i>	Lawyer Commercial and Common Law Team Law Commission of England and Wales
Mr Dominik SKAURADSZUN	Judge at the Higher Regional Court Germany
Mr Edwin SMITH <i>(remotely)</i>	Partner Morgan, Lewis & Bockius LLP
Ms Elisa SOH	Assistant General Counsel

Mr Daniel STARR <i>(remotely)</i>	Monetary Authority of Singapore Counsellor Ministry of Foreign Affairs of El Salvador
Mr Luc THÉVENOZ	Professor of Commercial Law Director of Banking and Finance Law Center University of Geneva
Mr Hubert de VAUPLANE <i>(remotely)</i>	Professor of International Banking and Financial Law Sciences Po – IEP Paris
Mr Ondřej VONDRAČEK <i>(remotely)</i>	DG Justice and Consumers Civil Justice Unit European Commission
Mr Steven WEISE <i>(remotely)</i>	Partner Proskauer Rose LLP

**HAGUE CONFERENCE ON PRIVATE INTERNATIONAL LAW**

Mr Christophe BERNASCONI	Secretary General
Ms Gérardine GOH ESCOLAR	Deputy Secretary General
Mr Harry CHENG <i>(remotely)</i>	Legal Officer
Ms Jung-Ah LEE <i>(remotely)</i>	Judge (Secondment)
Mr Camilo Isaí SALDÍAS ROBLES <i>(remotely)</i>	Intern
Ms Michelle Ann TAPPER <i>(remotely)</i>	Intern

UNIDROIT

Ms Maria Chiara MALAGUTI	President
Mr Ignacio TIRADO	Secretary-General
Ms Anna VENEZIANO	Deputy Secretary-General
Mr Rocco PALMA	Legal Officer
Ms Giulia PREVITI	Legal Officer
Ms Theodora KOSTOULA	Legal Consultant
Ms Sharmin CHOUGULE <i>(remotely)</i>	Visiting Researcher
Ms Oriana TORCASIO	Intern
Ms Jingyu LU	Intern