

**REPORT ON WORKSHOP 3**  
**INTRA-UK AND INTERNATIONAL DIMENSIONS OF DIGITAL ASSETS FOR SCOTLAND:**  
**WITH A FOCUS ON PRIVATE INTERNATIONAL LAW MATTERS AND DEVELOPING INTERNATIONAL**  
**FRAMEWORKS**

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The third and final workshop of the RSE-funded project ‘Digital Assets in Scots Private Law: Innovating for the Future’ was held at the University of Aberdeen on 12 September 2024. The workshop examined intra-UK and international dimensions of digital assets for Scotland, with a focus on private international law (PIL) matters and developing international frameworks.<sup>1</sup> It was conducted under the Chatham House Rule with participants across the UK and Europe from the judiciary, academia, legal practice including law reform, the Law Commission of England and Wales (LCEW), the Scottish Government, Liechtenstein’s Government Office for Financial Market Innovation and Digitalisation, and international organisations, including the United Nations Commission on International Trade Law (UNCITRAL) and the Hague Conference on Private International Law (HCCH).

The workshop was divided into three panels focusing on: (1) international legal frameworks on digital assets; (2) PIL aspects of digital assets in Scotland; and (3) experiences from jurisdictions across and

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<sup>1</sup> For the workshop programme, see the project website at <https://www.abdn.ac.uk/law/research/centre-for-commercial-law/digital-assets-in-scots-private-law-innovating-for-the-future-1850.php>.

beyond the UK on digital assets. Each panel included presentations, followed by a roundtable discussion.

### **Panel 1: International Legal Frameworks on Digital Assets**

The first panel considered relevant international initiatives by UNCITRAL, the International Institute for the Unification of Private Law (UNIDROIT), and the HCCH. The participants focused on UNCITRAL's work towards paperless trade, the UNIDROIT Principles on Digital Assets and Private Law (DAPL Principles), and HCCH's Project on Digital Tokens.

The discussion started with the consideration of the broader digital trade picture and UNCITRAL's work towards paperless trade. It was noted that:

- The stabilised text of the World Trade Organization (WTO)'s Joint Statement Initiative (JSI) on Electronic Commerce,<sup>2</sup> released in July 2024, provides guidance on three important areas for the future of digital trade: (1) facilitating end-to-end digital trade, (2) enabling an open digital trade environment, and (3) building a trusted and secure digital environment. UNCITRAL's work is relevant to both (1) and (3). Concerning (1), the stabilised text includes specific references to the UNCITRAL Model Law on Electronic Commerce 1996 and the UNCITRAL Model Law on Electronic Transferable Records 2017 (MLETR).<sup>3</sup> Regarding area (3), the UNCITRAL Model Law on the Use and Cross-border Recognition of Identity Management and Trust Services 2022 is an enabler for building a trusted and secure digital environment. The UNCITRAL Model Law on Automated Contracting, adopted in July 2024, and ongoing work of Working Group (WG) IV (Electronic Commerce) on transactions in data, are also relevant.
- Facilitating end-to-end digital trade is understood as ensuring digitalisation of all commercial documents for digital transformation, with an end-result of changing the mindset for documents. It also includes providing guidance on open issues. On this point, a number of ongoing initiatives of the UNCITRAL were noted, including a broad stocktaking exercise to examine existing texts;<sup>4</sup> a guidance document on paperless trade to facilitate business-to-government exchange of trade-related data and documents electronically, building on work with the UN Economic and Social Commission for Asia and the Pacific (ESCAP); and finalisation of the development of a guide, in coordination with the HCCH, on the use of distributed ledger technology (DLT) in trade with a practical focus. It was noted that UNCITRAL's future legislative work may arise from ongoing exercises, including consolidation of e-commerce texts, security interests on new types of assets like digital assets, and the use of decentralized autonomous organisations (DAOs) particularly for governance.
- A number of global emerging trends were observed, including the uptake for MLETR adoption (particularly following COVID and other ongoing disruptions) and facilitation of end-to-end digitalisation in trade, as well as movement towards interoperable digital trade ecosystems and specialised service providers. It was also highlighted that PIL input is needed, in relation to, for example, the role of party autonomy. A number of challenges were also observed, including the public sector's digital transformation, cultural and practical issues (rather than legal or technical ones), and continuous confusion between electronic trade records (ETRs) and digital assets from a legal point of view. On the last point concerning the confusion on the distinction, it was noted that an ETR may or may not be a digital asset and that the Electronic Trade Documents Act (ETDA) 2023 provides a solution by giving an electronic trade document (ETD) the same effect as an equivalent paper trade document.

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<sup>2</sup> See further [https://www.wto.org/english/tratop\\_e/ecom\\_e/joint\\_statement\\_e.htm](https://www.wto.org/english/tratop_e/ecom_e/joint_statement_e.htm).

<sup>3</sup> See Art 4 of the stabilised text.

<sup>4</sup> See the Report of the United Nations Commission on International Trade Law, Fifty-seventh session (24 June–12 July 2024), <https://documents.un.org/doc/undoc/gen/v24/055/72/pdf/v2405572.pdf>.

The participants continued the discussion with the UNIDROIT DAPL Principles,<sup>5</sup> with reference to their purpose and main features, and to Principle 5 on applicable law. It was noted that:

- The UNIDROIT DAPL Principles is an international instrument on digital assets and private law. It has a narrow scope of application designed to facilitate transactions in types of digital assets often used in commerce and is directed at various parties dealing with digital assets. The DAPL WG was composed of international legal experts and observers from civil law and common law jurisdictions and the DAPL Principles are a collective responsibility of the WG reflecting an international endeavour in their drafting. The DAPL Principles deal with private law questions only (in particular, proprietary rights), not regulatory ones. They were not designed as a model law or an entire code but as principles for national states to use, partially or as a whole, depending on their needs in devising their own laws. The DAPL Principles explain core concepts for novel aspects of digital assets and include rules to allow national states to achieve harmonisation for efficient commercial transactions while wishing to be sensitive to private law systems of all jurisdictions. In doing so, they take a functional approach and are technology neutral (considering that as technology develops, the law can become outdated) and jurisdiction neutral (taking into account that terminology is hard to translate from one system to another). Therefore, the DAPL Principles try to explain legal and technological concepts in terms of functions, adopting generality and neutrality across legal systems. The workshop participants considered functional and neutral approaches adopted in the DAPL Principles among their benefits. However, it was noted that the DAPL Principles are imperfect and incomplete. For example, while they provide a definition of digital assets and require that digital assets can be the subject of proprietary rights (which is the DAPL Principles' key contribution), they do not go beyond that and prescribe a classification of digital assets (for example corporeal or incorporeal moveables in Scots law) or consider different methods of transacting in these assets.
- In dealing with the applicable law, in general, there are three variations of approach, i.e. through national law on applicable law and jurisdiction; international uniform rules on applicable law and jurisdiction; and international uniform substantive rules. It was observed the DAPL Principles reflect none of these approaches and are rather a complicated instrument trying to deal with applicable law in isolation. The fact that the DAPL Principles are not a model law or convention but hold the ambition that states adopt legislation consistent with them<sup>6</sup> was considered sensible for substantive law but not necessarily for PIL, since the outcome of similar rules in substantive law and PIL could be different.
- Principle 5 deals with the applicable law concerning proprietary issues (being the focus of the principle), custody and insolvency in respect of digital assets. The following remarks were made at the workshop regarding Principle 5:
  - Although international PIL instruments are to be interpreted autonomously, the qualification of issues as proprietary is left to the *lex fori* under the DAPL Principles. Therefore, the scope of application of Principle 5 may not be as broad as perceived in Commentary 5.2 as the scope would depend on the forum's qualification. This, along with the fact that international jurisdiction is not dealt with by the DAPL Principles, seem in contrast with the Principles' aim to 'improve the clarity and legal certainty surrounding the issue of conflict-of-laws to the greatest possible extent'.<sup>7</sup>
  - It was queried why the DAPL Principles do not address international jurisdiction<sup>8</sup> given that they are a set of principles, not a convention, and that Principle 5(1)(d) might

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<sup>5</sup> See <https://www.unidroit.org/instruments/digital-assets-and-private-law/>.

<sup>6</sup> See the DAPL Principles, Introduction 0.4.

<sup>7</sup> See the DAPL Principles, Commentary 5.1.

<sup>8</sup> See Commentary 5.3.

become the key connecting factor to apply in the waterfall leading to the *lex fori* but with no accompanying rules on jurisdiction.

- Principle 5 does not contain a rule on subsequent change of choice-of-law or of statutory seat although property law is about the protection of third parties and therefore their rights should not be affected adversely by subsequent changes. Commentary 5.17 is rather confusing on this point. A simple rule could have dealt with this by defining a relevant point of time for the determination of the applicable law.
  - *Depeçage* seems possible under Principle 5. However, choosing a combination of laws, not implementing the DAPL Principles and implementing them entirely or partially to govern proprietary issues, can raise problems.
  - Regarding the law specified in the system under Principle 5(1)(b), Commentary 5.6 notes the possibility that a different applicable law is specified for two or more layers of networks, as a circumstance for which a State might consider adopting a specific rule to determine the applicable law. However, this would result in conflicting national PIL rules, indicating the need for unified PIL rules.
  - As per Principle 5(2)(f), the issuer has to fulfil certain criteria, and this significantly limits the application of the law of the issuer's seat under Principle 5(1)(c). One of those criteria is putting digital assets 'in the stream of commerce for value',<sup>9</sup> which adds another layer of complexity in applying Principle 5(1)(c).
- It was noted that the Centre for Commercial Law at the University for Aberdeen had submitted a response to the public consultation of the draft DAPL Principles and taken a critical approach on draft Principle 5.<sup>10</sup> The response had assessed, *inter alia*, that, under the proposal, uniformity may not be achieved on conflict of laws to the extent that is desired compared to the substantive law provision of the Principles and suggested that conflict of laws issues would benefit from further examination with the HCCH.
  - It was considered that Principle 5 had been inspired by the new Uniform Commercial Code (UCC) Article 12 on Electronic Controllable Records in the United States (US). Some participants expressed a view that UCC Article 12 should not have been the foundation for global harmonisation on digital assets. Some participants also questioned whether the UNIDROIT DAPL Principles were the right place for providing choice of law rules on digital assets.
  - Further to the point on the distinction between ETDs and digital assets, there was also some discussion in relation to the MLETR and DAPL Principles.

The discussion then moved on to the HCCH's Project on Digital Tokens.<sup>11</sup> It was noted that:

- This project is carried out as part of the HCCH's normative work, along with its other projects concerning the digital economy. The project aims to study PIL issues relating to digital tokens, excluding substantive law. Different approaches are observed in different jurisdictions on digital tokenisation, as well as various cross-border use cases raising PIL questions. This makes the examination of relevant PIL issues timely and desirable. As mandated by the Council on General Affairs and Policy (CGAP) of the HCCH, the Permanent Bureau (PB) carries out this project in partnership with relevant subject-matter experts and observers and in recognition of the importance of avoiding fragmentation among legal instruments developed by different intergovernmental organisations on related subject matters, including the UNIDROIT DAPL Principles.

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<sup>9</sup> See also Commentary 5.10.

<sup>10</sup> See B. Yüksel Ripley, A. MacPherson, M. Poesen, A. Albargan and L. Xuan Tung, with O. Momoh as an observer, 'Response to UNIDROIT Digital Assets and Private Law Consultation', on behalf of the Centre for Commercial Law at the University of Aberdeen (February 2023), <https://www.abdn.ac.uk/law/research/centre-for-commercial-law/public-policy-stakeholder-engagement-1109.php>.

<sup>11</sup> See <https://www.hcch.net/en/projects/legislative-projects/digital-tokens1>.

- ‘Tokens’, in the context of the project, refer to ‘virtual representations, stored electronically on decentralised or distributed storage mechanisms’. The project focuses on representative concrete use cases, e.g. stablecoins, payment tokens and utility tokens, and includes considerations of relevant (overriding) regulatory frameworks as necessary. The project excludes securities, Central Bank Digital Currencies (CBDCs) and carbon credits, due to separate projects the HCCH is undertaking or is involved with regarding them.
- The current status of work involves mapping of existing relevant legal frameworks (including from Brazil, France, the European Union (EU), Germany, Liechtenstein, Malta and Switzerland) as well as the work from other organisations and bodies (including the Financial Markets Law Committee, Financial Stability Board, UNICTRAL and UNIDROIT). It also involves mapping of relevant jurisprudence (including from Canada, France, Japan and Singapore). Party autonomy and choice of law in practice, and the application of traditional objective connecting factors as well as the development of novel ones for cross-border use cases of digital tokens are also being examined.
- The upcoming work under the project involves a consultation meeting with Latin American and Hispanophone jurisdictions on 27 September 2024 and the second working meeting of the project between 7-9 October 2024. The PB will report to CGAP at its meeting in March 2025 on the outcomes of this study, including proposals for next steps.

Following the consideration of the relevant work of UNCITRAL, UNIDROIT and HCCH, it was observed among participants that definitions differ in the area, followed with a query of whether uniform definitions could be possible through international collaboration. It was noted that industry and market use differs from that of lawyers and that there are already existing definitions, which make having uniform definitions challenging. In response to a question concerning collaboration among the three organisations discussed, it was noted that international coordination is important, and the three organisations are in regular dialogue to ensure coordination in line with their mandates. It was added that while their membership overlaps, it is not entirely identical; their mandates are different; and the timelines for their proposed outputs are also different.

### **Panel 2: Private International Law Aspects of Digital Assets in Scotland**

The second panel considered PIL aspects of digital assets in Scotland, focusing on some important preliminary matters, applicable law, jurisdiction, and matters relating to litigation. The panel also explored the scope for PIL reform in Scotland concerning digital assets.

The discussion started with features of DLT that pose certain challenges for PIL. It was noted that:

- DLT has a global nature and reach with participants across the world, meaning that there is an inherent cross-border element which gives rise to PIL issues. Disintermediation makes it difficult to identify a service provider or characteristic performer in systems or platforms, which poses problems because PIL uses these concepts in determining PIL questions. The distributed nature of the ledger raises issues with the localisation that PIL relies on. It is difficult to ascribe the ledger, or an asset digitally recorded on it, to a real-world location. There is also a lack of concentration of connections with a particular place. Pseudonymity in the systems poses problems with the identification of system participants as well as their locations.

The current position on digital assets in Scots PIL was outlined:

- Although Scotland is part of the UK, it has its own legal system and court structure. Scotland has a mixed legal system influenced by both English common law and continental civil law. It also has its own system of private international law. However, some of its PIL rules are the same or very similar to those of the English system. There is also a common legislature (in some respects) and the same supreme appellate court.
- There is no specific PIL provision regarding digital assets and therefore existing PIL rules in legislation and common law of Scotland apply to digital assets as appropriate. There is no

reported case in Scotland concerning PIL aspects of digital assets. The Scottish Government established an Expert Reference Group on Digital Assets to assess digital assets in the law of Scotland, but this initiative, including its consultation, focussed on substantive law matters. There is an ongoing law reform project in England and Wales on digital assets and ETDs in PIL, being conducted by the LCEW (not jointly with the Scottish Law Commission) for recommendations for that jurisdiction.<sup>12</sup> However, some PIL rules and the ETDA 2023 considered under the project apply across the UK, which make that project important for Scotland too.

The discussion next focused on some key preliminary questions and determination of the applicable law. It was noted that:

- Foreign element/internationality is a requirement for a PIL analysis and remains important also for the operation of party autonomy. Given that DLT has a global nature and reach, it was queried how a foreign element/internationality is to be ascertained for digital assets underpinned by DLT (e.g. through a rebuttable presumption of internationality or adoption of criteria given digital assets can raise legal questions in purely domestic situations as well). This might be important for a party who would rely on a foreign applicable law in Scottish courts since, in Scots PIL, the foreign law must be relevantly set out in written pleadings and proved by the evidence of an expert as a matter of fact, failing which Scots law is applied.
- There are uncertainties regarding characterisation. In Scots PIL, characterisation is in principle subject to the *lex fori* applied with an internationalist spirit whereas the nature of property (or of the subject matter of ownership) is characterised according to the *lex situs*. The characterisation of digital assets affects the law applicable to them and raises further questions. Given that digital assets are very diverse in nature, it was queried whether one category would work for them all or whether the focus in characterisation should be on systems instead. In workshop 2 of the project, an argument had been raised that, in Scots private law, a cryptoasset system could be viewed as a complex contractual arrangement involving all participating parties in the system, “with a cryptoasset in the system being a type of property with its own set of laws under the law of contract for the system”.<sup>13</sup> This characterisation is in line with some PIL arguments, which make a distinction between on-chain situations, involving (multilateral) relationships within the system, which are internal and contractual, and off-chain situations involving (bilateral) relationships external to the system and can be e.g. proprietary.<sup>14</sup>
- For contractual matters, the application of the provisions of the Rome I Regulation to permissioned systems does not seem problematic and can result in the application of a single law. A choice of law designated in a system can be deemed binding on all system participants under Article 3, and in the absence or invalidity of such a choice, the applicable law would be the law of the habitual residence of the company that owns or operates the system, as the

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<sup>12</sup> See <https://lawcom.gov.uk/project/digital-assets-and-etds-in-private-international-law-which-court-which-law/>.

<sup>13</sup> See A. MacPherson, B. Yüksel Ripley and L. Carey, Mapping the Legal Landscape for Cryptoassets in Scotland: Report on Workshop 2, June 2024, <https://www.abdn.ac.uk/law/documents/Digital%20Assets%20Workshop%202%20Report%20-%20Final.pdf>, p.3.

<sup>14</sup> See A. Dickinson, ‘Cryptocurrencies and the Conflict of Laws’ in D. Fox and S. Green (eds), *Cryptocurrencies in Public and Private Law* (OUP 2019), para 5.15; Lord Collins of Mapesbury and others (eds), *Dicey, Morris & Collins on the Conflict of Laws* (16th edn, Sweet and Maxwell 2022), para 25-080; B. Yüksel Ripley, ‘Cryptocurrency Transfers in Distributed Ledger Technology-Based Systems and their Characterisation in Conflict of Laws’ in J. Borg-Barthet, K. Trimmings, B. Yüksel Ripley and P. Živković (eds), *From Theory to Practice in Private International Law: Gedächtnisschrift for Professor Jonathan Fitchen*, Hart Publishing, Oxford 2024, pp.109-127; B. Yüksel Ripley, ‘The Law Applicable to (Digital) Transfer of Digital Assets: The Transfer of Cryptocurrencies via Blockchains’ in M. M. Fogt (ed), *Private International Law in an Era of Change* (Edward Elgar forthcoming).



service provider (under Article 4(1)(b)) or characteristic performer (under Article 4(2)). However, uncertainties exist for permissionless systems which typically have no choice of law or no obvious service provider or characteristic performer whose law could be applied. The closest connection test in Article 4(4) is difficult to apply to them because of decentralisation. For many permissionless systems, it would be challenging to identify a single law to govern these systems in their entirety and therefore splitting the applicable law would be inevitable.

- Consumer protection requires further attention concerning the applicability of Article 6 of Rome I and of the UK-wide Consumer Rights Act 2015 and Financial Services and Markets Act 2000 (as amended) via the forum's public policy or as mandatory rules.<sup>15</sup> Consumer protection issues alternatively might be left to substantive law entirely.
- For non-contractual matters, there would be limited utility of party autonomy concerning digital assets under Article 14 of the Rome II Regulation. In the absence of choice of law, uncertainties exist regarding localisation, for example, in determining the law of the country in which the damage occurs under Article 4(1) for tort/delict.<sup>16</sup>
- For proprietary matters, different terms and classifications of property law are accommodated in PIL with the 'moveable' and 'immoveable' classification.<sup>17</sup> The *lex situs* is predominant in Scots PIL concerning proprietary questions. For incorporeal (intangible) moveables with no physical location, the general practice has been to ascribe them to an artificial or fictional legal situs where they can be pursued or enforced. It is not clear how the Scottish courts would decide the situs of a digital asset underpinned by DLT. In England, there is no settled authority on this matter, with different court decisions referring to the place of domicile of the owner<sup>18</sup> or the place of residence of the owner.<sup>19</sup> It was suggested that the Scottish courts may take a similar view on the matter based on a habitual residence or place of business test, but with reference to the 'last known holder'.
- In the involvement of intermediaries, their terms and conditions could raise applicable law issues.<sup>20</sup> In relation to trusts, the UK is a party to the 1985 HCCH Convention on the Law Applicable to Trusts and on their Recognition, under which questions may arise concerning, for example, the weight to be given to 'the situs of the assets of the trust' under Article 7 for trusts of digital assets.
- In terms of the scope for PIL reform on applicable law, it was suggested that, for cryptoassets, there are some existing tools to utilise for determining the applicable law questions and traditional interpretations relating to those tools can be adapted to cryptoassets where possible and as appropriate. The developments in England and Wales and international developments (including HCCH's work) in the area are to be monitored closely in Scotland, rather than looking into an immediate PIL reform in Scotland. For ETDs, however, it was suggested that there seems to be some justification for expedited PIL reform following the enactment of the ETDA 2023. Given that there is no PIL rule in the ETDA 2023, and the PIL rules in some other legislation (e.g. Bills of Exchange Act 1882) are not very suitable for application to 'electronic' documents, the cross-border situations that will frequently arise in this context would benefit from legal certainty on the applicable law. The LCEW's ongoing law reform project was considered important for Scotland as the ETDA 2023 and some other relevant legislation under consideration for reform in that project applies in Scotland too. It

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<sup>15</sup> See the English case of *Payward Inc v Chechetkin* [2023] EWHC 1780 (Comm) regarding recognition and enforcement of foreign arbitral award.

<sup>16</sup> See *Fetch.AI Ltd v Persons Unknown* [2021] EWHC 2254 (Comm).

<sup>17</sup> In some countries, these terms are usually spelt as 'movable' and 'immovable', but this report has used the more common variants in Scotland.

<sup>18</sup> *Ion Science Ltd v Persons Unknown* (unreported) (21.12.2020); *Fetch.AI Ltd v Persons Unknown*, n 16 above; *D'Aloia v Persons Unknown* [2022] EWHC 1723 (Ch).

<sup>19</sup> *Tulip Trading Ltd v Bitcoin Association for BSV & Ors* [2022] EWHC 667 (Ch).

<sup>20</sup> For some examples, see the project's Report on Workshop 2, n 13 above, p.5.

was also noted that there would be benefits of UK-wide reform in this area to lessen the likelihood of intra-UK conflicts.

The discussion then moved on to international jurisdiction, with some preliminary points:

- First, classification of digital assets as moveable property could be appropriate for PIL purposes, while being mindful that PIL classification is a functionally distinct exercise from domestic law classification. Second, in cases where moveable property is in Scotland and the transaction has occurred abroad, this raises a PIL situation requiring intimation (or an equivalent) in Scotland to transfer the real rights to that property. Given the view that publicity may be achieved through intimation or equivalent on a blockchain,<sup>21</sup> it was queried, for PIL purposes, whether that would be sufficient or whether further evidence would be needed to show that intimation or equivalent has indeed occurred in Scotland. Third, the role of the *lex situs* and of the *lex fori* was noted in relation to jurisdictional grounds depending on the nature of the transfer, whether proprietary or contractual.
- The scheme of jurisdiction for Scotland was outlined, followed by considerations regarding digital assets:
  - o (1) Civil Jurisdiction and Judgments Act (CJJA) 1982 schedule 8 rules (for all defenders external to the UK) and schedule 4 rules (for defenders domiciled elsewhere in the UK), or
  - o (2) HCCH Convention on Choice of Court Agreements 2005, where applicable, or
  - o (3) HCCH Convention on the Recognition and Enforcement of Foreign Judgments in Civil or Commercial Matters 2019, in force throughout the UK from 1 July 2025, or
  - o (4) *Forum conveniens*.
- Regarding the CJJA 1982:
  - o Concerning domicile as general approach, it was noted that a person may be sued, 'where he has no fixed residence, in a court within whose jurisdiction he is personally cited' under schedule 8, rule 2(a). In analogy with the English case of *D'Aloia* where the service of proceedings was possible via a non-fungible token (NFT) airdrop against persons unknown,<sup>22</sup> it was queried whether there is scope in Scots law to advocate schedule 8, rule 2(a) in such situations where all other avenues have been exhausted.
  - o Regarding special jurisdiction, a number of options were addressed as alternatives to domicile, with a focus on jurisdiction for contract and delict. For contract and 'the place of performance of the obligation in question' (schedule 8, rule 2(b); schedule 4, rule 3(a)), it was raised whether the principal obligation upon which the contract is based is the place of delivery or control of digital assets. For delict (schedule 8, rule 2(c); schedule 4, rule 3(c)) and 'the place where the harmful event occurred or may occur', given that direct damage is ultimately necessary for successful delictual jurisdictional basis and that it is not possible to sue for secondary consequences of loss,<sup>23</sup> the lack of jurisdiction for economic loss was noted as a key issue for digital assets. The provisions relating to a trust (schedule 8, rule 2(g); schedule 4, rule 3(f)), declaration of property rights (schedule 8, rule 2(i); schedule 4, rule 3(h)), consumer jurisdiction (schedule 8, rule 3(1); s.15(B)(2a)), multiple defenders and counterclaims (schedule 8, rule 2(o); schedule 4, rule 5), interdict (schedule 8, rule 2(j)) and arbitration (schedule 8, rule 2(m)) can be applicable as further potential jurisdiction grounds depending on the circumstances.

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<sup>21</sup> D. Fox, 'The case for digital assets legislation in Scotland', Edinburgh Private Law Blog, February 2024, <https://blogs.ed.ac.uk/private-law/2024/02/11/the-case-for-digital-assets-legislation-in-scotland/>.

<sup>22</sup> *D'Aloia v Persons Unknown and Others*, n 18 above.

<sup>23</sup> See *Marinari v Lloyds Bank plc* (Case C-364-93) [1995] ECR I-2719 and *Dumez France SA and Tracoba SARL v Hessische Landesbank* (Case C-220/88) [1990] ECR I-49.



- Regarding exclusive jurisdiction, it was queried whether some form of public register for digital assets could be advocated which would allow jurisdiction in relation to validity of entries in the register (schedule 8, rule 5(1)(c); schedule 4, rule 11(c)).
- For the 2005 and 2019 HCCH conventions, it was argued that some exclusions in Article 2 could be examined further in Scots PIL concerning digital assets, in particular the ones relating to the validity of entries in public registers, anti-trust (competition) matters, and arbitration.
- Regarding *forum conveniens*, it was queried how appropriateness of alternative forum could be established in dealing with decentralised and delocalised technology. With reference to the ‘non-Scottish forum clearly more appropriate’ test for declining jurisdiction in favour of that forum as expressed in *Hall v James Finlay (Kenya) Ltd*,<sup>24</sup> it was suggested that *forum conveniens* could enable a pragmatic role for Scottish courts in shaping PIL’s contribution to dealing with digital assets.
- In relation to a possible PIL reform on jurisdiction, it was suggested that Scotland needs to be future-proof as a forum of choice. The CJA 1982 schedules 4 and 8 can broadly apply to jurisdictional aspects of digital asset disputes, with some points requiring further attention and consideration. The options for future could be an incremental interpretation by courts, or adaptation through further additional paragraphs within schedule 4 and 8, or a combination of both approaches.

The discussion next focused on issues in Scottish legal practice concerning digital assets, starting with ETDs and raising the question of what relevance the ETDA 2023 has to legal practice in Scotland:

- Although the ETDA 2023 was considered by some workshop participants as a ‘game-changer’ in the market,<sup>25</sup> it was argued that it has not changed, and possibly will not change, legal practice very much in Scotland. This, *inter alia*, relates to the drafting technique of the ETDA 2023. Under s.3(2), ETDs are to have the same effect as paper trade documents. However, ETDs are not defined at all, and only examples of them are given in the ETDA 2023. Therefore, for a document featuring in the statutory open list of potential ETDs, such as a bill of lading, the change the ETDA 2023 makes for that document is really a change about evidence: instead of having to prove the paper bill of lading in the course of leading one’s evidence on the facts at the proof, one has to prove electronic material.
- The pursuer would, therefore, have to prove that the system was ‘reliable’ when the electronic version of the bill was created, in that it was then working properly. However, courts possibly would not want to hear such evidence in every case. Therefore, either a list of systems designed to have the relevant capabilities will be deemed reliable, or the systems will be presumed to be reliable, leaving it to the defender to prove that a given system was not correctly manufactured or that it was not working properly on the relevant day. This would be a difficult task to the point of impracticability.
- Even those evidential issues are likely to be very rare occurrences in Scottish courts. If the bill of lading includes arbitration or exclusive law and jurisdiction clauses in favour of England (which is very common), it is highly unlikely that a proof (civil trial) would take place in Scotland, as the merits would be heard in England (usually in London as the chosen forum) under English law. The only possible involvement for *Scottish fora* in such cases would be to enable ship arrestments for the obtaining of security for the claims made in English proceedings. Although, for such applications, the existence of a *prima facie* case on the merits

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<sup>24</sup> [2023] CSIH 39, para [65].

<sup>25</sup> This view was expressed also among the participants of workshop 1 of the project as reported in L. Carey, B. Yüksel Ripley and A. MacPherson, Implications of Electronic Trade Documents Law Reform for Scotland: Report on Workshop 1, April 2024, <https://www.abdn.ac.uk/law/documents/Digital%20Assets%20in%20Scots%20Private%20Law%20Report%20of%20Workshop%201.pdf>.

is required to be demonstrated,<sup>26</sup> that would unlikely be affected by the form of the bill of lading since a *prima facie* case depends on questions of fact and substantive law and only a prima facie assessment of evidence, and does not require a detailed examination of the evidence.

In relation to potential issues that may arise in litigating cases with a foreign element concerning digital assets in Scotland, it was noted that the very first problem would be the identification (or at least accurate identification) and designation of the defender, followed closely by the acquisition of jurisdiction over them:

- Contract cases: The identification of the defender tends to be reasonably straightforward, with the greater difficulty being in the acquisition of jurisdiction over the defender in Scotland. Experience of other types of international contract suggests that where the contract includes an exclusive jurisdiction clause, it is decidedly unlikely that the clause is written in favour of Scotland.<sup>27</sup> The existence of such clauses in favour of a non-Scottish forum, if valid, would likely be the end of the action in Scotland, with no question about the digital asset or the applicable law being considered at all. In other cases where the Scottish court has jurisdiction under schedule 8 of the CJA 1982 to consider the pursuer's claim, the question becomes whether the fact that the subject matter of the dispute is a digital asset, or relates to such an asset, has any real significance for the prosecution of the case. Regarding applicable law, issues relating to proof of the foreign law could possibly arise, including cost in obtaining evidence from the relevant jurisdiction to allow the foreign law to be pled in a party's written pleadings.
- Delict cases: The identification of the defender and, consequently, the acquisition of jurisdiction would be potentially more difficult. The primary problem for the pursuer in a fraud case would be the need to identify and trace the defender, and to establish whether any assets belonging to him against which any decree could be enforced can be found somewhere that would recognise a Scottish decree (judgment). It was explained that these very practical points often put a stop to contemplated litigation in the Scottish courts. In contrast to England, one cannot sue 'persons unknown' in Scotland. Service of the application to the court is required to commence an action seeking a remedy for the defender's assault on the pursuer's rights. It was noted that, for Scots law, the consequences of digital assets being, or not being, property which can be possessed are significant, particularly in relation to remedies and interim protective measures which may be sought. In Scotland, there is no delict of conversion but *spuilzie* (pronounced 'spoolie') is a remedy in defence of possession that can be invoked by a dispossessed possessor of an item of property even, in certain circumstances, against its owner. However, *spuilzie* would be of no assistance if the asset, held to ransom by cybercriminals, was incapable of being possessed. For such cases, the wrongful detention of the asset by cybercriminals<sup>28</sup> was raised at the workshop as a possible ground of action by arguing that *spuilzie* does not depend on the possession of the asset but on its control. However, the wrongful detainer would still need to be identified as a defender.
- Concerning ancillary matters, such as the obtaining of security or the making of orders to assist in the conduct of foreign proceedings, it was noted in relation to digital assets that:
  - o An anonymity order protecting the pursuer from retaliatory action by cybercriminals may be needed, as occurred in the English case of *AA v Persons Unknown*.<sup>29</sup> In Scotland, there are no rules on the grant of anonymity but the general guidance in case law suggests that, in appropriate circumstances of commercial sensitivity or confidence, it would be open to the court to allow anonymity to the party placed at

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<sup>26</sup> See sections 15E and following of the Debtors (Scotland) Act 1987.

<sup>27</sup> It was noted that the position is similar regarding arbitration clauses.

<sup>28</sup> *Cf Galbraith Trawlers Ltd v Advocate-General for Scotland* 2021 SLT (Sh Ct) 211.

<sup>29</sup> [2020] 4 All ER (Comm) 704.

risk if anonymity is not accorded him.<sup>30</sup> The matter is discretionary, and, depending on the circumstances, an anonymity order can be granted by a Scottish court to protect the pursuer.

- The identification of the defender would also raise difficulties in securing an interdict (prohibitory remedy), since interdict can, in principle, only be directed against a named or sufficiently identified person or entity.
- Even if the defender was identified and located in Scotland, the asset might not be capable of being arrested or attached as protective measures. Although s.27 of the CJA 1982 allows the petitioner to seek from the Court of Session a warrant for interim attachment or arrestment or inhibition of an asset on the dependence of pending foreign litigation, the conditions imposed therein would raise significant obstacles to obtaining such a warrant: (1) the asset must be 'situated in Scotland', a condition which may not be possible to demonstrate in the case of many digital assets; and (2) 'such a warrant could competently have been granted in equivalent proceedings before a Scottish court', a condition which would involve the demonstration of compliance with the rules in Scotland governing the doing of diligence on the dependence of an action (protective measures during court proceedings) and the proof of the need for such diligence (protective measures).

Following the in-depth consideration of PIL matters relating to jurisdiction, applicable law, and civil procedure that may arise in Scotland in litigating disputes concerning digital assets, the participants further discussed characterisation and the scope of possible legislative reform in Scotland. On characterisation, it was noted that authority has not settled this yet in Scotland or England. Regarding law reform, it was suggested that it would be preferable to take a minimalist and simple approach and reform for the moment substantive Scots law only, while closely monitoring the ongoing PIL projects on digital assets undertaken by the LCEW and by the HCCH for Scotland's PIL agenda for reform.

### **Panel 3: Experiences from Jurisdictions Across and Beyond the UK on Digital Assets**

The third panel considered experiences from jurisdictions across and beyond the UK, focusing on England and Wales, Switzerland and Liechtenstein.

The discussion started with the consideration of ETDs in England. It was noted that:

- In relation to cross-border situations, there are concerns around PIL. Many documents, particularly the ones used in trade finance, usually do not have a governing law clause. Instead, they incorporate International Chamber of Commerce (ICC)'s standard terms, such as the Uniform Customs & Practice for Documentary Credits (UCP) 600.
- The ETDA 2023 has no provision dealing with PIL. This contrasts with the MLETR which provides for Article 19 on non-discrimination of foreign ETRs. The ETDA 2023 is silent on that point which raises the question of whether it recognises and protects ETDs wherever they are issued and under whichever law.
- The main concerns relate to promissory notes and bills of exchange, and in relation to the Bills of Exchange Act 1882 which codifies the law relating to bills of exchange, cheques, and promissory notes, and applies across the UK. It was assessed that s.72 of the Act provides conflict of laws rules intended for paper bills of exchange only,<sup>31</sup> and therefore is not fit for purpose for electronic ones.
- In cases where there is no governing law clause in relation to a bill of exchange or promissory note and a dispute arises between the parties including a conflict on the applicable law, it was noted that there is an argument in English legal practice that if s.72 of the Bills of Exchange Act

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<sup>30</sup> See *A v British Broadcasting Corporation* 2014 SC (UKSC) 151 paragraphs 35 *et seq* and *Scottish Lion Insurance Company Ltd v Goodrich Corporation Inc.* 2011 SC 534.

<sup>31</sup> S.72 applies also to cheques and promissory notes as per s.73 and s.89(1) respectively.

1882 applies to determine the applicable law, the applicable law might not necessarily be English law and consequently an electronic form of that bill or promissory note might not necessarily be recognised as equivalent to their paper form via the ETDA 2023. It was also added that to ensure the application of the ETDA 2023, governing law clauses designating English law were being inserted to such documents based on the thinking that s.72 of the Bills of Exchange Act 1882 would then not apply to those documents because there would be no conflict of laws situation. There seem to be uncertainties relating to this and it was suggested that the ETDA could have had a short provision that where there is a governing law clause, s.72 of the Bills of Exchange Act 1882 does not apply.

- Various observations were made on the emerging trends in England:
  - o There is a trend for market involvement with various initiatives, resulting in the emergence and expansion of market experts.
  - o Reliance on common law seems to be the trend in the method of drafting legislation for English law and for some UK-wide statutes (e.g. ETDA 2023), which raises related points including leaving matters to interpretation of the judiciary (e.g. 'reliable system' as a mixture of compliance with the ETDA 2023 and matters of fact and operational tools of the system) or relying on case law development. However, there is no guarantee of relevant cases being brought before courts in the near future given the costs involved for private parties. It was suggested that moving away from such common law reliance could provide more certainty, saving the market time and money.
  - o Further trends are seen in trade and finance documents given uncertainties around the application of the ETDA 2023 in cross-border situations. Those trends include adding governing law clauses to documents, changing standard forms and templates, or inserting provisions dealing with the agreement of parties that they are using a 'reliable system' within the meaning of the ETDA 2023.
  - o There is also a notable development of market standards, including growing adoption of the MLETR, ICC Digital Standards Initiative, and International Trade and Forfeiting Association (ITFA) Digital Negotiable Instruments Initiative.

The discussion next moved to digital assets under Swiss private (international) law. It was noted that:

- Switzerland is widely known as crypto-friendly. It amended its law in 2021 to respond to the developments of DLT. In doing so, it took a specific approach by not introducing an entirely specific new Act on the matter but instead a framework incorporating provisions into the existing federal laws, including the Swiss Code of Obligations and PIL Act. However, it is still known as the DLT Act. The DLT Act has the purposes of strengthening legal certainty, removing barriers to DLT-based applications, and limiting new risks in relation to DLT. It also aims to be technologically neutral (e.g. the term DLT does not appear in the Act).
- There are new articles, incorporated by the DLT Act, into the Code of Obligations on ledger-based securities (*droits-valeurs inscrits*), i.e. Article 973 and further of the Code of Obligations, which have been in force since 1 February 2021. These new articles provide a private law regime for tokens registered on a blockchain to increase legal certainty while respecting the principle of technological neutrality. Tokens become instruments comparable to securities (*papiers-valeurs*), with their own legal effects. Generally speaking, all the rights that can traditionally be incorporated into (paper-based) securities can be incorporated into ledger-based securities, e.g. claims, some corporate rights (notably shares), some intellectual property rights, some rights *in rem*, and financial instruments. In order to create a link, there are two conditions:
  - o (1) A registration agreement: This refers to an agreement by which the parties agree that a right is recorded on a ledger, and can only be enforced and transferred through that ledger. As a minimum, the agreement is to provide for the registration of a right

on a ledger and that the right can only be asserted and transferred through the ledger designated in the agreement. It may also provide additional terms and conditions.

- (2) A ledger that meets the legal requirements.
- The DLT Act amended also the Swiss PIL Act concerning applicable law in different ways:
  - Introduction of Article 145a on the law applicable to a transfer [of a claim] by means of an instrument: This is the main provision addressing the applicable law of digital assets. It follows party autonomy and provides for the application of the designated law in the instrument representing or transferring the claim. There is no requirement relating to form for designation of law (e.g. choice of law included to a smart contract should be valid); or minimal connection with the instrument; or consumer law limitation. It has an *erga omnes* application, meaning that it can apply to third parties. If there is no designated law, there is a subsidiary rule providing for the application of the law of the seat of the issuer or, failing such, of its habitual residence. The issuer refers to the debtor of the claim, not the technical issuer who deploys smart contracts (unless both are the same). These connecting factors are traditional ones inspired by the applicable law to titles to goods under Swiss PIL. As regards the pledging, Article 105 provides an exception. In the absence of a choice of law, the law of the state of the pledgee's habitual residence applies (Article 105(2)). It was noted that the scope of Article 145a is broad, covering any claim represented by an instrument in paper or equivalent form and transferred by means of such instrument. This includes ledger-based securities (Article 973d and further of the Code of Obligations) and other instruments in equivalent form. Regarding privately issued cryptocurrencies (e.g. Bitcoin), it was stated that they are not included in the scope of application of Article 145a, and, in addition, they should not be included in the scope of application of Article 147 which applies to currencies, although there is no case law. Intermediated securities are not in the scope of Article 145a either because the *lex libri sitae* applies to them as a *lex specialis*. It was added that it is debated whether tokenised shares of a foreign company or physical instruments are within the scope or whether they are subject to the *lex societatis* or the *lex chartae sitae* respectively as *lex specialis*.
  - Amendment of Article 106 on the applicable law of documents of title and equivalent instruments: The law designated in Article 145a determines whether an instrument represents goods, such as bills of lading. In relation to this, there was some further discussion relating to the ETD and DLT connection among the workshop participants.
  - Amendment of Article 105 on the applicable law on the pledging of claims, securities and other rights: This is a *lex specialis* to Article 145a for pledging.

The discussion then focused on Liechtenstein's experience regarding PIL aspects of digital assets. It was noted that:

- International transactions are the norm in Liechtenstein, not the exception, since Liechtenstein encompasses a high degree of integration and international cooperation and coordination (including but not limited to through its membership of the European Economic Area (EEA), the European Free Trade Association (EFTA) and Customs and Currency Union with Switzerland).
- Liechtenstein enacted the world's first comprehensive legal framework for the token economy in 2019 by the Act on Tokens and Trustworthy Technology Service Providers (TVTG) which entered into force on 1 January 2020. The Act uses the term 'token' which felt appropriate for that time for this legal framework. Political considerations and objectives of the Act include securing future prosperity, attractive jobs and international competitiveness; providing attractive framework conditions for innovative companies; building up know-how among the authorities; enabling the token economy; and the protection of users and legal certainty.
- The TVTG contains regulatory provisions as well as a civil law section dedicated to private law issues. It is principles-based and adopts technical neutrality. The TVTG sets out requirements

of registration and supervision of TT Service Providers with headquarters or a place of residence in Liechtenstein. There is no token classification in the TVTG. Instead, it introduces and adopts a 'Token-Container-Model' under Article 2(1)(c), according to which all kinds of rights can be represented in tokens. Token is a piece of information on a TT System, which can represent claims or rights of memberships against a person, rights to property, or other absolute or relative rights; and is assigned to one or more TT identifiers. One key aspect is the introduction of decentralised securities, which was noted as comparable to Swiss ledger-based securities.

- Broadly on PIL, it was stated that there is a small number of cases on digital assets in Liechtenstein and they are predominantly international cases raising PIL issues. There are challenges with identifying and applying traditional connecting factors to digital assets. It was noted that legal certainty is considered important to ensure by linking the issuance and transfer of digital assets to a legal system which recognises the intended legal effects of that issuance and transfer.
- It was explained that there were no adaptations in Liechtenstein's PIL during the legislative process. Instead, the TVTG states that it applies to tokens issued by Liechtenstein TT Service Providers or if the parties declare its application. In these cases, the token is considered to be located in Liechtenstein and subject to the TVTG.
- The significance of party autonomy and choice of law was underscored. It was noted that party autonomy is the most reliable option in this context, and, without choice of law, certainty cannot be provided adequately given the complexities with identifying and applying connecting factors (e.g. based on location) in a decentralised and digital environment. Despite being drafted as early as 2018, the TVTG is partly in line with the UNIDROIT DAPL Principles on party autonomy. However, party autonomy also comes with its shortcomings (e.g. validity of choice of law agreed to avoid mandatory rules of other jurisdictions).
- Challenges remain in cross-border situations on the law applicable to tokens generated outside of Liechtenstein in the absence of choice of law in favour of the law of Liechtenstein. It was noted that the connecting factors that exist in Liechtenstein's PIL will be consulted in such situations to determine the applicable law.
- It was added that the rules have not been tested in courts yet and they may be still imperfect as mentioned elsewhere in relation to PIL rules concerning digital assets.

The workshop closed with concluding remarks and thanks to the participants.