



Workshop on Issues Related to Enforcement in Digital Assets (10 JUNE 2022)

Summary Conclusions

Prepared by the UNIDROIT Secretariat in July 2022

1. On 10 June 2022, a Workshop on Issues Related to Enforcement in Digital Assets took place as a side event to the 101st Session of the UNIDROIT Governing Council in Rome and on Zoom. The Workshop was attended by Members of the UNIDROIT Governing Council, the UNIDROIT Working Group on Digital Assets and Private Law, the UNIDROIT Working Group on Best Practices for Effective Enforcement, as well as Members of the Steering Committee of the Working Group on Digital Assets.
2. The Workshop was co-Chaired by Hideki Kanda, UNIDROIT Governing Council Member and Chair of the Working Group on Digital Assets and Private Law, and Kathryn Sabo, UNIDROIT Governing Council Member and Chair of the Working Group on Best Practices for Effective Enforcement.
3. The UNIDROIT Secretary-General, Ignacio Tirado, opened the Workshop and welcomed the participants. He invited the Chairs to give some initial remarks introducing their Working Groups.
4. Mr Kanda highlighted the main areas which the Digital Assets Working Group had been working on. He noted that the Working Group had been tasked to develop private law related rules, rather than regulation. In this regard, the Working Group had taken a technologically neutral approach towards digital assets, which were presently broadly defined as electronic records which could be subject to control.
5. The Workshop focused on the problems and possibilities of judicial and extra-judicial enforcement of claims in the digital environment, covering the issues of digital assets tracing, freezing and recovering, and automatic and algorithmic enforcement offered by smart contract technology. It also highlighted the areas of divergent treatment of digital assets, types of rights which can be recognised in digital assets, available post-default and general remedies, and optimal guidance for judicial officers in enforcement involving digital assets. The concept of control was factual element, rather than a legal one.
6. It was highlighted that the Digital Assets Working Group clearly noted that digital assets could be subject of proprietary rights. This terminology had been used to accommodate jurisdictional differences between civil law and common law countries. The Draft Digital Assets Principles included guidance on linked digital assets, transfers relating to digital assets, custody of digital assets, secured transaction where digital assets were the collateral (acknowledging the digital assets could be the subject of security rights), control over digital assets, as well as other issues. The Draft Principles presently only examined the issue of enforcement in the context of secured transactions, and would be further developed following the workshop.
7. Ms Sabo introduced the Working Group on Best Practices for Effective Enforcement and summarised the mandate which it had been given, which included developing best practices to improve the effectiveness of enforcement, addressing lengthy procedures, reducing costs, increasing transparency, while at the same time ensuring parties' protection. In this regard, she noted that technology was a major consideration of their Working Group and that issues related to judicial and

extra judicial enforcement where the subject matter related to digital assets or rights in digital assets held by parties were important to address. She added that the Working Group would seek guidance from the Workshop on various matters, including tracing, seizing, valuation, and combining different enforcement mechanisms.

8. The primary goal of the Workshop for the purposes of the Enforcement project was to identify which legal rules presented practical problems for the enforcement related to digital assets and which methods could be used to align the present legal rules to assets existing in digital and virtual environments.

9. Roundtable 1 was dedicated to remedies generally available in relation to digital assets. The discussion was led by Carla L. Reyes, and consisted of Andrew M. Hinkes, Hin Liu, and Jason Grant Allen who provided insights into the technicalities of enforcement against digital assets.

10. Andrew M. Hinkes focussed on tracing, forensic tools and service providers in this area. He outlined some of the difficulties posed in tracing digital assets. He noted that while there was a perception that blockchains were anonymous, this was not entirely true, as all activity on any public blockchain was, by its nature, publicly visible. With the use of tools such as blockchain explorers, certain information about any transaction and asset could be found. While this information did not offer the real identity of a party, and did not meet a 'Know Your Customer (KYC)' standard, it did satisfy a certain 'Know Your Transaction (KYT)' standard.

11. However, using a transaction's history on the blockchain, correlations could often be built which could help identifying the parties which are involved. Mr Hinkes described several technological tools available in this regard to be able to identify parties to a digital asset transaction, which could then be used for probabilistic tracing, as well as issuing orders against a holder of a specific set of assets. Mr Hinkes also explained that forensic analysis and predictive tools, used by service providers cooperating with law enforcement, could effectively overcome most of the difficulties in the enforcement of rights in digital assets.

12. Carla L. Reyes provided an overview of the recent LCX case, which involved recovering stolen funds, where the claimants had been largely successful. The courts (in two different jurisdictions) issued freezing orders and ordered blacklisting of a wallet into which the stolen funds had been transferred, which were both enforced successfully. She paid particular attention to the way the court order had been served (by airdropping an NFT into the wallet).

13. Jason Grant Allen explained the recent English case of *Lavinia Deborah Osbourne v (1) Persons Unknown (2) Ozone Networks*, where the proprietary nature of NFTs was established. This, in turn, allowed for new remedial avenues over the stolen assets, such as an order of specific performance, rather than damages, and the creation of a constructive trust over the stolen assets. Furthermore, as a matter of private international law, the digital assets' location was connected to the domicile of the owner of the digital assets.

14. Hin Liu presented the case of MakerDAO, the first major DeFi project, where many financial services, such as calculation of interest rate and liquidation were automatically managed by algorithms, following the initial decision of token holders. This included enforcement of collateral in liquidation of DAI. The case study demonstrated the differences between traditional and digital environments, posing the question of which traditional enforcement regime mechanisms for physical assets could be replicated in the digital environment. One key difference was that digital assets were not physically anchored, and sometimes could not be 'pulled out' of a particular arrangement. In this case, the code with which the smart contract in which the digital assets are locked played an important role.

15. Roundtable 2 focused on the enforcement of security rights in the context of secured transactions involving digital assets, primarily through extra-judicial mechanisms, and how that enforcement might affect third parties, particularly custodians. The panel was led by Louise Gullifer, and consisted of Marek Dubovec, Neil Cohen, and Andrea Tosato, who discussed the practical aspects of enforcement of security rights in digital assets in light of international standards on secured transactions.

16. Louise Gullifer set out three main points for discussion: 1) third-party effectiveness of a security right and perfection by control; 2) practical steps for disposing of a digital asset after achieving control over it; and 3) automatic enforcement of security right over a digital asset. She noted that the discussion would focus on extrajudicial enforcement of security rights excluding judicial enforcement. The roundtable would examine what aspects in the enforcement of a security right over a digital asset required specific legal treatment.

17. Neil Cohen gave an overview of the UNCITRAL Model Law on Secured Transactions underlining the relevant rules in Chapter VII, which were complemented by Articles 3 and 4. Mr Cohen drew attention to the complicated functioning of the terms “in a commercially reasonable manner” and “recognised market” in the context of digital assets. He also stressed the prohibition of waiving the debtor’s pre-default protections contained in the Model Law, especially regarding the prior notice requirement, and the possible necessity for relaxation of this rule for digital assets.

18. Andrea Tosato elaborated on the practical implications of achieving control over a digital asset and the ways in which this control could be achieved, i.e. directly or through a custodian. He noted the processes available for achieving control, and how they mostly required a certain amount of cooperation by the grantor.

19. Additionally, Mr Tosato presented a complex situation of obtaining control through a multi-sig structure as it may become dependent on collaboration from the grantor or other third parties, involved in the multi-sig structure. He further covered the nuances of automatic enforcement and different levels of automation in determining default. He stressed that complete automation was not yet possible in this field.

20. Marek Dubovec explained that there could be situations where a security right is not perfected (by registration or other means) and the creditor does not have control over the asset. Even in these cases, a security right over a digital asset was still enforceable, albeit with a risk of subordination to competing (or created later) right or invalidation in insolvency.

21. Mr Dubovec also raised the question of law applicable to enforcement which might differ depending on whether the security right had been perfected or not. Enforcement rules might also differ because of the type of digital asset in question and the definition used for the digital asset in a particular jurisdiction. He exemplified that if the digital asset did not fall in some narrowly defined category (such as CBDC and bank account type rules), general enforcement rules may apply (as is the case with Ethereum and Bitcoin). Without control, a complication could arise due to the need for cooperation from the custodian who does not have a duty to cooperate under the UNCITRAL Model Law.

22. With regard to questions of preserving or recovering the value of a digital asset in its disposition, particularly when a debtor is liquidated, the roundtable noted that while standard doctrines such as ‘commercial reasonableness’ and ‘recognised market’ would continue to apply, their definition and relevance needed to be examined more closely. These issues were increased in the cryptocurrency world where asset values were often very volatile. Realising the value of digital asset collateral could possibly work in the same way as that of receivables – however, it was noted that this issue needed to be explored further.

23. With regard to automatic enforcement of a security right, possibly through smart contract, it was noted that the determination of default was always dependent upon some sort of information becoming confirmed or being provided to the software – as such, fully automated enforcement or realisation of security rights was rare, and even when done so, was completely consistent with a predetermined procedure which the parties had agreed to.

24. The participants agreed that rules on a notification requirement before disposal or acquisition should be assessed in the digital asset context. This was because of the nature of the assets and transactions on the blockchain. Unless these transactions occur on recognized markets in which notifications are not required, the grantor may have to waive its right to a notification to proceed smoothly with the enforcement.

25. The roundtable received questions which needed additional exploration by the Working Groups, including one relating to the interplay between automatic enforcement and the prohibition of ipso facto clauses in insolvency.

26. Roundtable 3 explored the pressing issues of judicial enforcement on digital assets, including traditional and technology-enabled enforcement, procedures, and practices. The panel was led by Geneviève Saumier, and consisted of Rolf Stürner, Patrick Gielen, and Teresa Rodríguez de las Heras Ballell who assessed the extent to which the characteristics of digital assets presented a challenge to judicial enforcement of various creditors' rights.

27. Rolf Stürner expanded the notion of the application of 'judicial enforcement' by use of public authority with the use of documents authenticated by notaries, checks or invoices. Mr Stürner focused on practical problems of digital assets enforcement and stressed the importance of measures in personam together with measures in rem. Examples of electronic debenture bonds held in custody and debtor's cryptocurrency units stored in a platform accessible via a personal wallet demonstrated the necessity to develop complex combinations of enforcement measures for digital assets.

28. Patrick Gielen provided an overview of the Global Code of Digital Enforcement issued by the UIHJ. This included universal principles governing the use of digital technology in judicial enforcement and contracts, including standard procedures for seizing crypto assets and enforcement against digital assets. He also mentioned relevant case-law in the field of enforcement and seizure of digital assets in England (*Robertson v Persons Unknown*) and the Netherlands (*C/17/182478 KG RK 22/24*), and practical problems encountered by judicial officers.

29. Teresa Rodríguez de las Heras Ballell noted the importance of digital assets in enforcement, especially given their economic value. She noted that the clarity was important with regard to questions such as the legal treatment of digital assets, their recognition as objects of proprietary rights, and the nature of the relationship between the user account holder and the crypto-currency exchange platform.

30. Ms Rodríguez de las Heras Ballell also referred to the obstacles for digital assets' enforcement, such as location identification, debtor or third-party cooperation and information disclosure mechanisms.

31. The roundtables were followed by a Q&A session with the participants. The Workshop was concluded by Hideki Kanda and Kathryn Sabo who thanked all the participants for their comments and noted their respective Working Groups would use these deliberations to further work on questions related to enforcement in digital assets.