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WHITE PAPER

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I. INTRODUCTION

1. This White Paper provides an expert analysis of UNIDROIT's work in the area of financial markets and technology and puts forward concrete recommendations for the future. After outlining key developments in financial markets, Part One provides an analysis of relevant adopted UNIDROIT instruments. UNIDROIT began its work in this field in 2001. The Geneva Securities Convention (2009), the UNIDROIT Principles on the Operation of Close-Out Netting Provisions (2013), and the UNIDROIT Legislative Guide on Intermediated Securities (2017) were the first instruments produced under this line of work. They were followed by the UNIDROIT Principles on Digital Assets and Private Law (2023) and the UNIDROIT Legislative Guide on Bank Liquidation (2025), the latter situated at the intersection of financial markets and insolvency law.

2. Part Two contains an examination of ongoing and approved projects that are relevant for the workstream on financial markets and technology. These include the project to develop Principles on the Legal Nature of Verified Carbon Credits, which is at the intersection of financial markets and sustainable development and at its final stage of development at the time of writing of this White Paper, as well as the new projects in UNIDROIT's 2026-2028 Work Programme on (i) Regulation of Digital Risks through Civil Liability Law, (ii) Insolvency of Insurance Enterprises, and (iii) Legal and Regulatory Aspects of Investment-based Crowdfunding.

3. Part Three discusses possible areas for future work as identified by the FMT Committee. Part Four offers concluding remarks and synthesises the Committee's recommendations in a clear and actionable manner.

II. EVOLUTION OF FINANCIAL MARKETS

4. Financial markets have undergone a profound transformation since the establishment of UNIDROIT in 1926. While UNIDROIT's mandate remains as relevant today as it did a century ago, structural and normative shifts in the global financial system present challenges as well as opportunities for advancing its work.

5. Firstly, globalisation has drawn geographically distant regions closer together, with parties increasingly operating in multiple markets and transactions routinely crossing borders. A central driver of globalisation has been the rise of powerful financial intermediaries. Acting as bridges between national markets, they enable investors to engage in cross-border transactions, diversify investments across multiple jurisdictions, and mitigate pricing inefficiencies through arbitrage. At the same time, the intermediaries must contend with diverse private law regimes, which impose burdens on both them and the investors, thereby reducing the overall efficiency of financial markets. In this context, substantive divergences in private law represent an unnecessary obstacle: they generate legal uncertainty, increase costs, and create potential risks. Eliminating such divergences is therefore more important than ever to promote the security and efficiency of financial markets.

6. Secondly, since the creation of UNIDROIT, financial crises have continued to challenge the regulatory architecture of the global financial system over the years, prompting significant reforms both at the global and the domestic level to promote global financial stability. Notable among them were the Great Depression of the 1930s; the European banking crisis of 1931; a spate of banking crises in the 1980s and 1990s, including the savings and loan crisis of the United States (U.S.), the Swedish banking crisis, the Asian financial crisis, and the Mexican financial crisis; the global financial crisis of 2007-08; and, more recently, the 2023 banking turmoil in the U.S. and the collapse of Credit Suisse in Europe. As public law has evolved in response to these global challenges, regulation often diverged in implementation among different jurisdictions, thereby adding to the complexity of the

financial regulatory landscape, especially for cross-border banking groups. At the same time, private-law considerations continue to evolve in complexity and often overlap or closely interact with regulation, including in the area of bank insolvency. Regulation and private law are no longer clearly divided, but rather, are intertwined. Many private-law rules today serve general interests and goals, especially, but not only, those with an overriding mandatory nature. Moreover, public law sets many boundaries for the exercise of contractual freedom under private law, which are necessary to safeguard common interests. To succeed, the economy needs both a reliable private-law framework and efficient regulation. Consequently, the harmonisation of private law in the area of financial markets cannot be done in isolation from regulatory goals and principles, but needs to respect their symbiotic relationship.

7. Thirdly, technology has fuelled significant shifts in the organisation and provision of financial services around the world. Advances in communication technology, especially the internet, have made information available around the globe in milliseconds. As a result, many parts of financial markets are no longer rooted in any single jurisdiction, posing fresh challenges for the application of private law. In parallel, digitalisation has enabled the provision of innovative financial services and products, often blurring lines that once neatly defined various segments of the financial system, and introducing new actors, such as Fintechs, into the payments space. Moreover, the increasing reliance on cloud-based solutions to support the operating environments of financial services providers allows faster, more cost-effective operations and scale, while increasing cyber and operational risks and driving more regulation. Related developments driven by technology include the introduction of open banking initiatives in some jurisdictions, the emergence of digital/virtual assets such as crypto assets, including cryptocurrencies and stablecoins, as well as central bank digital currency. The challenges posed by these developments are compounded by the increasing reliance on artificial intelligence in the provision, as well as regulation and supervision, of financial services.

8. Fourthly, the advent of climate change has created new realities for the global financial system. On the one hand, financial services providers grapple with increasing physical and transition risks. On the other hand, they are confronted with the opportunity to finance the transition to a green economy through innovative financial instruments to help meet the aspirations of the global zero-carbon transition.

9. Last but not least, in the post-pandemic world, where macroeconomic imbalances in emerging and developing economies are elevated, and geopolitics and uncertainties in trade policy threaten the multilateral trade system, the global financial system continues to evolve, requiring constant attention to private-law implications that need to be addressed. According to the International Monetary Fund (IMF), sovereign debt crises are becoming commonplace, as a significant number of low-income economies are considered debt-distressed or at high risk of distress.

10. In sum, globalisation, the rise of intermediation, the impact of technology, and environmental and geopolitical changes have rendered financial systems deeply interdependent, interconnected, integrated, and more complex. The rules for their governance are being set at the global level, yet they diverge among different jurisdictions. The once-clear distinction between regulation and private law has become increasingly blurred and calls for a coordinated treatment. All of these developments pose tremendous challenges as well as opportunities for UNIDROIT's mandate of modernising, harmonising, and coordinating private law, including the law applicable to financial markets and technology.

PART ONE — ADOPTED INSTRUMENTS

11. This Part provides an analysis of the five instruments adopted by UNIDROIT thus far in the area of financial markets and technology. It addresses each instrument's development and adoption, purpose, key content, impact, and recommendations.

12. The impact of each instrument is assessed with reference to two dimensions: (i) implementation and application, and (ii) engagement. For the purposes of this White Paper, implementation and application refer to the extent to which an instrument has operative legal effect and is applied in practice. Implementation refers to ratification in the case of hard-law instruments and incorporation into domestic law in the case of soft-law instruments. Application can be understood as the effective application and use of the instrument by courts and arbitral tribunals, public authorities, and private actors (e.g., references in legal opinions), or through private enforcement. Together, implementation and application constitute key indicia of the success of UNIDROIT's legal instruments.

13. Where possible, the success of the instruments addressed by this White Paper is analysed by reference to the qualitative impact the particular instrument has had on domestic legal systems and market functioning, *e.g.*, whether the instrument led to harmonisation or convergence and enhanced effectiveness of domestic legal frameworks (as general objectives of transnational unification of law) and whether the instrument met its specific purpose as defined at the start of the instrument's development.

14. Beyond formal implementation and application, the analysis also considers the extent to which domestic legal frameworks align with the instrument, or specific parts thereof, even where such alignment is not the result of direct implementation or where causation is difficult to prove. This form of indirect influence may arise, for example, where domestic reforms draw inspiration from an instrument's principles or solutions without formally incorporating the instrument. Such considerations are particularly relevant for soft-law instruments, where formal implementation mechanisms are typically absent and where application may be more difficult to track or measure.

15. Engagement, on the other hand, captures the extent to which the instrument has generated discussion and scholarly attention. It includes academic literature, events, and broader discourse relating to each instrument. Engagement encompasses both activities involving experts who participated in the development of the instrument and, separately, contributions by external experts who were not involved in the drafting process. Annexe 1 provides indicia of engagement, offering non-exhaustive lists of events and publications in which UNIDROIT instruments in the area of financial markets and technology have been discussed.

I. UNIDROIT INSTRUMENTS ON INTERMEDIATED SECURITIES

A. Development and adoption

16. UNIDROIT has developed a comprehensive legal framework for intermediated securities through two complementary instruments: the Geneva Securities Convention and the Legislative Guide.

1. The Geneva Securities Convention

17. UNIDROIT undertook its project on substantive rules regarding intermediated securities (Study LXXVIII) from 2002 to 2009 to create an international instrument for improving the legal framework for securities holding, transfer, and collateralisation. The Geneva Securities Convention was

developed through a comprehensive negotiation process involving extensive consultations with practitioners and scholars from different countries and legal traditions.

18. The development process began with a Study Group that convened its first meeting in September 2002 and held five sessions through 2004, resulting in a preliminary draft Convention submitted to UNIDROIT Member States on 23 December 2004. There were then four sessions of the Committee of Governmental Experts from May 2005 to 2008, during which the draft Convention text was further developed. Throughout this period, UNIDROIT organised several expert seminars in Paris, Bern, and other locations to facilitate discussions amongst practitioners, scholars, and government representatives.

19. The diplomatic Conference phase began with the first session held in Geneva on 1-12 September 2008 at the invitation of the Government of Switzerland, with participation from 52 States and 11 international organisations. During this session, outstanding policy choices regarding insolvency, rules of central securities depositories, and innocent acquisition were resolved, and the second reading of the draft Convention was finalised. A draft Official Commentary was prepared for the final session.

20. The final session took place on 5-9 October 2009 in Geneva, again at the invitation of the Government of Switzerland, with representatives from 50 States and 13 international organisations and groups (including the European Union (EU), the European Central Bank, the Hague Conference on Private International Law (HCCH), United Nations Commission on International Trade Law (UNCITRAL), the IMF, the Association of Global Custodians, the European Banking Federation, the European Central Securities Depositaries Association, European Issuers, the Asia-Pacific CSD Group, the International Swaps and Derivatives Association (ISDA)), Trade Association for the Emerging Markets, *Union Internationale des Avocats*, and the International Association of Young Lawyers. On 9 October 2009, the Conference adopted the Convention and gave it the official name UNIDROIT Convention on Substantive Rules for Intermediated Securities ("Geneva Securities Convention").

21. The Final Act was signed by 37 States and the EU, with Bangladesh becoming the first State to sign the Convention itself. The Convention, drafted in a single original in the English and French languages, was subsequently opened for signature at the seat of UNIDROIT in Rome. The Convention has been translated into Chinese and Spanish.

2. The UNIDROIT Legislative Guide on Intermediated Securities

22. The 2009 diplomatic Conference established a Committee on Emerging Markets Issues, Follow-up and Implementation, co-chaired by Brazil and China, to support the promotion and implementation of the Convention. The Committee held four meetings in Rome (2010), Rio de Janeiro (2012), Istanbul (2013), and Beijing (2017). These meetings were combined with *colloquia* on financial markets law with substantive deliberations. Through these meetings, the Committee developed the scope and structure of the Legislative Guide, with the third meeting in Istanbul establishing the framework based on a narrower outline proposed by Member States.

23. An informal experts group, chaired by Mr Hideki Kanda, then prepared the draft Guide through three meetings in Rome (2015-2016), with the draft circulated twice for broad consultation among States, international organisations, and stakeholders. The first day of the fourth meeting of the Committee took the form of an open Colloquium on Financial Markets Law. It considered UNIDROIT's financial markets instruments and related efforts to enhance and ensure legal certainty in both current and future securities holding systems and included expert panels discussing, *inter alia*: intermediated securities holding and transfer in the Asia-Pacific region; recent developments with respect to insolvency law, regulation, and international development; and technological advances, such as distributed ledger and blockchain technologies, and their possible application to securities

holding and transfer. On the second day of the fourth meeting, held in Beijing on 29-30 March 2017, the Committee considered in detail the draft Guide and the comments received, agreeing upon certain amendments and additions and ultimately recommending that the Guide, as revised, be submitted to the UNIDROIT Governing Council for review and adoption.

24. The UNIDROIT Legislative Guide on Intermediated Securities was adopted by the UNIDROIT Governing Council at its 96th session in May 2017. The Legislative Guide, like the Convention, is available in English, French, Chinese, and Spanish. These two instruments are complemented by the Convention of 5 July 2006 on the Law Applicable to Certain Rights in Respect of Securities Held with an Intermediary, elaborated within the HCCH ("HCCH 2006 Securities Convention"). All three texts are based on a neutral and functional approach to the international regime governing intermediated securities, so that they can be adapted to different legal traditions.

B. Purpose

25. The Geneva Securities Convention establishes a comprehensive legal framework governing the holding and transfer of intermediated securities, with the primary objectives of ensuring legal certainty and enhancing investor protection in modern financial markets. The Convention addresses the legal uncertainties that arise when securities are held in multi-tiered holding systems, where investors do not hold securities directly but through chains of intermediaries such as banks and other custodians. It sets out core principles governing the rights of account holders, the acquisition and disposition of intermediated securities, and the effectiveness of such rights against third parties, including in insolvency proceedings. The Convention aims to facilitate cross-border securities transactions by providing legal certainty and reducing systemic risk in global securities markets. For this purpose, the Convention adopts a distinctive "functional and neutral" approach to accommodate the diverse legal systems and market practices across different jurisdictions. This methodology is fundamental to the Convention's design and represents a pragmatic solution to the challenge of harmonising securities law in a global context where different countries have fundamentally different legal traditions and conceptualisations of property rights.

26. The UNIDROIT Legislative Guide on Intermediated Securities serves as a comprehensive companion document to the Geneva Securities Convention, providing detailed exposition and practical guidance on the principles and rules established by the Convention. This instrument is designed to assist legislators, policymakers, and legal practitioners in understanding and implementing the Convention's provisions within their respective jurisdictions. The Guide encompasses various dimensions of intermediated securities law, including the legal characterisation of intermediated securities, the rights and obligations of intermediaries, and mechanisms for investor protection.

C. Key content

27. The Geneva Securities Convention defines key concepts such as securities, intermediated securities, securities accounts, intermediaries, account holders, control agreements, and designating entries, and sets its application via forum conflict rules pointing to a Contracting State's law. Core account-holder rights arise upon credit to a securities account, including the right to exercise rights attached to the securities (dividends, distributions, voting where applicable), to dispose or grant interests, and to instruct alternative holding, all effective against third parties. The Convention establishes that intermediaries must enable the exercise of these rights and protect the integrity of holdings by safeguarding and allocating securities so they are unavailable to intermediary creditors, acting only on authorised instructions, and passing on information and distributions. Transfers are effected primarily by debit/credit entries without additional steps for third-party effectiveness, with optional methods including agreement with the relevant intermediary, designating entry, or control agreement that can be adopted by State declaration. The Convention protects innocent acquirers for

value and provides clear priority rules governing competing interests, including special rules for interests granted by an intermediary. It harmonises visible registration techniques and effectiveness/finality notions aligned with market practice, whilst also codifying intermediary duties to control issue integrity and facilitate exercise of rights in multi-tier, cross-border chains.

28. The UNIDROIT Legislative Guide is organised in nine parts, covering: the basics of intermediated holding and models (individual ownership, co-ownership, trust, security entitlement, contractual obligations); the Convention's purpose and functional approach; rights of account holders and intermediary duties and liabilities; transfer methods, unauthorised dispositions, innocent acquirer protection and priorities; integrity measures (upper-tier attachment ban, sufficiency and allocation/segregation, treatment of securities settlement systems); insolvency protections (effectiveness of interests, loss-sharing, system finality); special collateral provisions (including right of use, commercial reasonableness, netting and regulatory overlays); conflict-of-laws aspects; and implementation links to other international standards.

29. The Legislative Guide distils 15 Legislative Principles guiding lawmakers on account-holder rights, intermediary obligations and liability, transfer methods and protections, integrity and segregation, system finality, issuer-facing rules, insolvency, collateral frameworks, conflict-of-laws, and coherent domestic implementation in line with international benchmarks. Practically, the Guide advises where declarations under the Convention can tailor domestic regimes – such as limiting scope to regulated intermediaries, selecting transfer methods and control types, prioritising designating entries, and specifying collateral scope – and where non-Convention law must fill gaps, including defining authorised dispositions and consequences, or intermediary liability.

D. Impact

1. Implementation and Application

30. Although the Geneva Securities Convention has attracted only one signature and no ratifications, its influence has been substantial. For example, Australia has adopted the Convention's definition of "securities account". In Canada, article 2714.6 of the Quebec Civil Code appears to have been influenced by the Convention.[2] Spain has introduced the pro-rata sharing rule in case of the insolvency of an intermediary and a deficit of the securities held for its customers.[3] Switzerland has incorporated much of the substance of the Convention into its domestic law.[4]

2. Engagement

31. Notwithstanding that it has not been ratified, the Geneva Securities Convention, building in part on the interest attracted by the HCCH 2006 Securities Convention, has contributed enormously to the understanding and development of the private law and insolvency law relating to intermediated securities. It is true that neither convention has been successful *as a convention*. But the engagement

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[2] Quebec Civl Code art. 2714.6 (holder of movable hypothec over securities or security entitlement may alienate or grant movcable hypothec to third person); [2] Maya Cachecho, Les droits réels et personnels sur les titres détenus auprès d'un intermédiaire: analyse comparative en droit québécois interne et international privé, PhD Thesis, August 2015, p. 183.

[3] Securities Markets and Investment Service Act, art. 15.4 (Where an intermediary holds insufficient ISIN-matched securities in its accounts to meet the full entitlements of holders recorded in its detailed register, those securities are distributed pro rata among holders, who retain a credit claim against the entity for any shortfall).

[4] Thévenoz Luc, New Legal Concepts regarding the Holding of Investment Securities for a Civil Law Jurisdiction – The Swiss Draft Act, 2005, p. 305 and following; Leibenson, Joël Philippe Gérard, Les actes de disposition sur les titres intermédiés, 2013, p. 71 : «*A n'en point douter, l'influence des travaux d'UNIDROIT sur le droit suisse des titres intermédiés, positionne le texte de la Convention sur les règles de droit matériel applicables aux titres intermédiés comme un des points de comparaison importants pour la loi fédérale sur les titres intermédiés* ».

of the securities industry and the interested communities of legal and regulatory experts with these instruments cannot be underestimated. The Geneva Securities Convention and the elaboration provided by the Guide have generated a global standard for the issues that private law must address for intermediated securities. Just as important (perhaps more so) and as discussed next, the Convention, and later the Guide, have inspired global scholarship and dialogue on intermediated securities. This process has shed light (and enlightenment) on a topic that for private-law experts (practitioners and scholars alike) had theretofore been a "black box" of seemingly impenetrable back-office infrastructure. Due in large part to the interest and attention generated by the development of the Geneva Securities Convention, the private law of intermediated securities, including secured transactions and the related insolvency laws, are now mainstream topics. Consequently, the law of intermediated securities is a subject that is better understood within the legal, regulatory, financial, and investment communities.

32. During the period in which the Geneva Securities Convention was being developed, the private law of intermediated securities was the subject of many international meetings, conferences, and symposia. For example, UNIDROIT conducted outreach conferences on the project in Bern (2005) and Paris (2006). The *Universidad Rey Juan Carlos* and the Madrid Stock Exchange held a symposium on the draft convention in Madrid (2007). Kyoto University and the Bank of Japan held symposia on intermediated securities under Japanese law and the draft Convention in Kyoto and Tokyo (2008). The draft Convention also was a prominent topic at Waseda University's international week symposium in Tokyo (2009). Oxford University sponsored a symposium in Oxford on intermediated securities in which the draft Convention was a featured topic (2009). Notably, these events involved participation not only by some of the experts involved in the process that resulted in the Geneva Securities Convention, but many other policymakers and practitioners as well.

33. In the years following the adoption of the Convention in Geneva, intermediated securities and the Convention continued to receive considerable attention from practitioners, regulators, and academics. As was the case during the Geneva Securities Convention's formative years, the individuals and organisations involved in this engagement reflected a broad spectrum of securities industry representatives and professionals beyond those who had been directly involved with the Convention's creation.

34. The Geneva Securities Convention was quite influential in the discussions and work of the European Commission in connection with its Legal Certainty project. This project, formally titled "Legislation on Legal Certainty of Securities Holding and Dispositions", was an initiative by the European Commission's Directorate-General Internal Market and Services aimed at regulating the legal framework governing the holding and disposition of securities held through securities accounts and the processing of rights flowing from such securities. Following the Geneva Securities Convention, the project adopted a functional approach that sought to harmonise substantive law across EU Member States without fundamentally altering national ownership concepts. The relationship between the EU Legal Certainty Project and the Geneva Securities Convention was central to the consultation process, with the Commission explicitly noting that the EU approach and the Convention were compatible with each other, and that most EU Member States and the EU itself had participated in the negotiations of the Geneva Securities Convention.

35. The Geneva Securities Convention and later the Legislative Guide also continued to be the subject, or a central component, of conferences, symposia, and other meetings across the world and a focus of many publications relating to intermediated securities.[5] An Official Note to the Geneva

[5] For a non-exhaustive list of events and publications in which UNIDROIT's instruments on intermediated securities have been discussed, see Annexe 1 to this White Paper.

Securities Convention was published in 2012.[6] The Geneva Securities Convention also provided inspiration for several other books relating in substantial part to intermediated securities.[7] Once again, the authors involved in these publications extended far beyond the experts involved in the promulgation of the Geneva Securities Convention and publication of the Legislative Guide.

36. Finally, the Geneva Securities Convention has influenced other UNIDROIT projects. For example, the Convention's treatment of innocent acquisition of intermediated securities substantially influenced the treatment of innocent acquisition in the UNIDROIT Principles on Digital Assets and Private Law as well as in the ongoing work on the UNIDROIT Principles on the Legal Nature of Verified Carbon Credits.

37. The foregoing and Annexe 1 merely provide examples of the events and publications inspired in large part by the Geneva Securities Convention. Not mentioned are the many published articles and chapters in other collected works that address intermediated securities.

3. Conclusion

38. Although the instruments developed by UNIDROIT in this sector have received considerable attention among academics, they have not had a clear and immediate impact on States. Neither is the Convention in force, nor has the Guide been fully implemented in any State. However, they have had an indirect or mediated effect on the modernisation of national laws applicable to these matters in certain States. They have also helped to draw attention to the importance and the need to provide a robust and internationally coherent legal framework for intermediated securities.

E. Recommendations for the future

1. Lessons Learned

39. It is worth reflecting on the reasons why the Convention has not been ratified by a sufficient number of States to enter into force and that the Guide has not been implemented as such in any State. In principle, the FMT Committee believes that there may be three reasons.

40. The first one is related to *momentum*. Many States (*e.g.*, Brazil, China, Japan, the Nordic States, Spain, and the U.S.) had already "modernised" or "reformed" their laws on intermediated securities when the Convention was adopted, some with contrasting approaches. It should be noted that in the world of securities markets, the costs of legal transition are very high. Operators develop their computer programmes, design their practices, and formulate their documents and models to meet the standards and rules of current law and courts' rulings. Furthermore, legal certainty is key in this sector. Any modification of the law introduces new uncertainties and may force a change in those practices and documents, with consequent economic cost, which could partially explain why those States that had modified their laws before the adoption of the Convention were very reluctant to ratify or accede to it. Legal path dependence is always a hurdle to any legal change, and in particular, to the adoption of international instruments. In this regard, an early and thorough discussion with all directly affected operators, and in particular with those who will bear the direct cost of the legal change, is highly advisable before launching any project in this area, along with an analysis of the economic implications it may have.

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[6] Hideki Kanda, Charles W. Mooney, Jr., Luc Thévenoz, & Stéphane Béraud (with Thomas Keijser on behalf of the UNIDROIT Secretariat), *Official Commentary to the UNIDROIT Convention on Substantive Rules for Intermediated Securities* (Oxford University Press 2012).

[7] For a non-exhaustive list of publications in which UNIDROIT's instruments on intermediated securities have been discussed, see Annexe 1 to this White Paper.

41. The second is related to the nature of the instrument. The rigidity of the convention approach was a poor fit with the existing regulatory frameworks and private law of many States. A more flexible approach, such as a model law or, perhaps better, a set of principles to which private law should conform, might have been better received. Such an approach might both facilitate outreach and alleviate concerns that harmonisation would compel structural changes in industry practice. A more flexible format could also reinforce the message that the rules aim to support and stabilise existing market structures rather than replace them.

42. Thirdly, the Committee believes that the lack of a clear and convincing explanation of the relationship between the Convention regime and regulatory law has also been an obstacle to its adoption. In some States, regulatory authorities have expressed concern about the interference that a private-law instrument could have on their regulatory regimes for market organisation and discipline.

43. Apart from these reasons underlying the lack of ratifications of the Convention, two further aspects deserve particular attention. Financial markets are, by their very nature, global in scope. Any endeavour to harmonise substantive law based on a neutral and functional approach must therefore be accompanied by a corresponding effort to unify the applicable conflict-of-law rules, for a system of substantive law can function effectively only when paired with choice-of-law rules that are conceptually and functionally coherent with it. In the context of intermediated securities, the conceptual framework developed under the Hague Convention served as a source of inspiration for the UNIDROIT Convention. Preserving this coherence in future instruments is of paramount importance, and close collaboration among the international organisations entrusted with these tasks is accordingly indispensable.

44. Finally, decisions about future work on intermediated securities should consider whether the development of new technologies and infrastructures may make intermediation, as understood by the Convention, less significant or even unnecessary.[8]

2. Building on the Successful Engagement with the Convention and Legislative Guide

45. The FMT Committee recommends that the Secretariat continue to expand the influence of the Geneva Securities Convention and the Legislative Guide. In that respect, it suggests two plausible approaches.

46. **First, UNIDROIT should consider renewed promotion of the Convention and the Guide to encourage States to consider incorporation of the substance of each instrument into its laws and regulations**. Examples might include treatment of both instruments in conferences, workshops, and educational programmes, in particular addressed to the main stakeholders in this market. This initiative could involve contacting organisations (*e.g.*, bar/legal associations, banking associations, IMF, International Organization of Securities Commissions (IOSCO), the World Bank, or others) to contribute to this task.

47. **Second, UNIDROIT should consider supporting the first approach by drawing on the Convention and the Guide to create a more concise set of Principles**. To support this work, the Committee recommends undertaking a survey of current developments in the field of

[8] See, e.g.Charles W. Mooney, Jr. & Sandra M. Rocks, "Final Report on the Work of the Task Force on Securities Holding Infrastructure: Part Two, 79 The Business Lawyer 679, 692-99, 702-03 (2024) (discussing direct holding model for securities and compatibility with existing trading and settlement infrastructure); see also Charles W. Mooney, Jr. & Sandra M. Rocks, "Final Report on the Work of the Task Force on Securities Holding Infrastructure: Part One", 79 The Business Lawyer 343, 372-91 (2024) (discussing prevailing problems associated with intermediated securities holding infrastructure in the United States).

intermediated securities.The findings would inform the preparation of concrete suggestions for such set of Principles that reflects the latest state of play and emerging practices.

II. UNIDROIT PRINCIPLES ON THE OPERATION OF CLOSE-OUT NETTING PROVISIONS

A. Development and adoption

48. At its 67th session (December 2010), the General Assembly of UNIDROIT called for the development of an international instrument on close-out netting. Following this decision, the Secretariat established a Study Group composed of experts in the law of international financial markets. It included representatives from regulatory agencies, international organisations, legal practice, and academia, from major financial centres and developing economies. The Study Group met three times between April 2011 and February 2012, and then submitted a set of Draft Principles concerning the enforceability of close-out netting provisions.

49. The UNIDROIT Governing Council reviewed the Draft Principles prepared by the Study Group at its 91st session (May 2012). It decided to convene a Committee of governmental experts for their further consideration and finalisation. This Committee met twice, in October 2012 and March 2013. At its second session, it approved a revised version of the Draft Principles. The UNIDROIT Principles on the Operation of Close-Out Netting Provisions were finally adopted by the UNIDROIT Governing Council at its 92nd session in May 2013.

B. Purpose

50. The Principles aim at ensuring the effective operation of contractual close-out netting clauses, particularly in the event of a party's insolvency. In essence, such clauses provide a mechanism whereby all mutual obligations between two counterparties are offset against each other. Unlike ordinary set-off, however, close-out netting entails additional steps – termination, acceleration, valuation, and aggregation. The combined effect is the substitution of multiple outstanding claims with a single net obligation (the "close-out amount"), payable by one party to the other.

51. Close-out netting clauses significantly mitigate the consequences of counterparty default. Their importance in financial markets can hardly be overstated. To illustrate, in swap or derivatives transactions, counterparties typically owe each other substantial sums, even though the net economic exposure may be modest. Absent enforceable netting clauses, participants would face excessive credit risk and need vast amounts of collateral, which would render such transactions uneconomical. They could no longer serve their useful economic purposes, for instance to hedge against a currency risk.

52. By securing the enforceability of close-out netting, the Principles aim at supporting modern financial architecture. Their goal is to facilitate economically useful transactions, reduce systemic risk, and enhance the stability of financial markets. At the same time, the Principles aim at safeguarding special public interests in the context of the resolution of financial institutions, which could be undermined by the automatic operation of the netting mechanism.

C. Key content

53. The Principles consist of eight concise and accessible provisions. They explain the purpose and background of close-out netting provisions in a clear fashion and contain appropriate policy proposals. The Principles make a technically complex subject easy to understand and contain provisions that can be readily implemented. They strike a necessary balance, safeguarding systemic

stability while preserving the core objectives of insolvency law. These qualities have undoubtedly facilitated their widespread reception and have contributed to legal convergence.

- Principle 1 delineates the scope of the Principles by providing that they apply to close-out netting provisions entered into by "eligible parties" in respect of "eligible obligations".
- Principles 2-4 contain definitions of key notions. Principle 2 defines the term close-out netting provision and its constituent elements, Principle 3 specifies which parties are "eligible" to enter into such agreements, and Principle 4 identifies the types of obligations that are eligible for netting.
- Principles 5-7 form the substantive core. Principle 5 advises States against conditioning the operation of netting provisions on the fulfilment of formalities or reporting requirements. Principle 6 sets out the fundamental rule that close-out netting provisions must be enforceable in accordance with their terms. Principle 7 extends the operability of such provisions to the period following the opening of insolvency proceedings.
- Principle 8 contemplates the imposition of stays on close-out netting in the context of resolution regimes for financial institutions. This aligns the Principles with other international standards, such as the Financial Stability Board's (FSB) Key Attributes of Effective Resolution Regimes, and safeguards important public interests.

D. Impact

1. Implementation and Application

54. The UNIDROIT Principles on the Operation of Close-out Netting Provisions have proven to be a remarkable success. Since their adoption in 2013, they have served as a model and point of reference for legislative reform across jurisdictions worldwide. Currently, around 75 States have adopted specific netting legislation, with a further 14 considering to do so.[9] In many of these States, the Principles have served as a source of inspiration and information. The enforceability of close-out netting arrangements is also part of the supranational law that is binding for the 30 Member States of the European Economic Area.[10]

55. As a result, today there is genuine global convergence in this area of financial law. This achievement is particularly noteworthy given the purely "soft-law" character of the Principles. They are not binding but provide valuable guidance for legislators, regulators, and courts. Nevertheless, they have exerted a profound normative influence, shaping the content of national legal systems. The Principles thus exemplify the capacity of soft-law instruments to promote uniform private law at the global level.

56. The Principles have materially enhanced the safety, robustness, and resilience of financial markets. They provide legal certainty for market participants, secure the enforceability of close-out netting provisions, particularly in cases of insolvency, and thereby prevent contagion effects that could otherwise destabilise financial markets. Today, close-out netting is an integral part of the calculation of capital requirements by financial institutions.

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9 For a list on the status of netting legislation worldwide, see https://www.isda.org/2020/07/03/status-of-netting-legislation/ (last accessed 3 August 2026).

10 Art. 3(1) Directive 1998/26/EC of 19 May 1998 on settlement finality in payment and securities settlement systems, [1998] OJ L 166/45; Art. 7 Directive 2002/47/EC of 6 June 2002 on financial collateral arrangements, [2002] OJ L 168/43.

2. Engagement

57. Leading global standard-setters – including the Basel Committee on Banking Supervision (BCBS) and the FSB – refer to the UNIDROIT Principles, and the World Bank actively promotes their implementation worldwide. The Principles are closely aligned with the work of the Committee on Payments and Settlement Systems (CPSS), which has called for a "sound and transparent legal basis" for netting arrangements.[11]

58. The UNIDROIT Principles have been cited by legislators around the world when reforming their laws. To give an example, in the preparation of the South African Financial Markets Act 2012, it was suggested in a consultation to add two provisions based on Principles 5 and 6 of the UNIDROIT Principles on Close-Out Netting; this suggestion was then followed in the resulting legislation.[12] Similar stories can be told from countries around the world. The Principles are also used by other international organisations when giving advice on law reforms, such as the World Bank.[13]

59. The UNIDROIT Principles on Close-out Netting were also discussed in numerous academic publications. While many hailed the Principles as a cornerstone of financial law, there were also critical voices. It has been argued that netting would increase rather than reduce risk in financial markets and propagate the effects of shocks to the system.[14] This critique neglects the unique counterparty risks in derivatives transactions, in which the scale of outstanding obligations vastly exceeds potential profit margins. If close-out netting clauses were unenforceable, these transactions would become uneconomical, which would, in turn, severely impair the efficiency of financial markets. Furthermore, the critique also ignores the significant steps taken by regulators to avoid domino effects following from close-out netting. These steps have been taken into account in the UNIDROIT Legislative Guide on Bank Liquidation, which – in line with the approach in the FSB Key Attributes – allows a short stay on close-out netting on strict conditions and only if that is necessary to effect a sale as a going concern in liquidation.[15]

60. An illustration of the significant risks of invalidating netting clauses comes from Germany. In 2016, the German Supreme Court ruled that the close-out netting clause in the German standard derivative agreement would be unenforceable under the German Insolvency Code.[16] As a consequence of this judgment, German banks would have needed to immediately reassess their derivatives positions and provide additional collateral in the amount of several billion Euro. On the afternoon of the same day, the German Federal Financial Supervisory Authority (BaFin) therefore issued a circular asking credit institutions to disregard the Supreme Court's judgment for the purposes of calculating own funds. This type of circular was unprecedented in Germany. Within a record time of six months, the German legislator amended the German Insolvency Code to enshrine

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[11] CPSS, Principles on Financial Infrastructures, 2012, available at https://www.bis.org/publications/principles-financial-market-infrastructures (accessed 22 November 2025), p. 24.

[12] See Comments and Response Document, National Treasury, Republic of South Africa (accessed 30 October 2025).

[13] World Bank, "Principles for Effective Insolvency and Creditor/Debtor Regimes", 2015, available at https://documents1.worldbank.org/curated/en/518861467086038847/pdf/106399-WP-REVISED-PUBLIC-ICR-Principle-Final-Hyperlinks-revised-Latest.pdf (accessed 29 October 2025).

[14] Rizwaan J. Mokal, "Liquidity, Systemic Risk, and the Bankruptcy Treatment of Financial Contracts", 10 Brooklyn Journal of Corporate, Financial & Commercial Law 15, 59-62 (2015).

[15] UNIDROIT Legislative Guide on Bank Liquidation (2025), Recommendations 64-66.

[16] German Supreme Court (BGH), 9 June 2016, IX ZR 314/14.

the circular's result in the law.[17] This anecdote illustrates the risks faced by legal systems that fail to recognise netting clauses as valid.

E. Recommendations for the future

61. Certain jurisdictions have not yet adopted their legislation in line with the Principles, which creates potential inconsistencies, unforeseeability, and risks. Continued efforts are therefore necessary to advance their acceptance and to communicate their benefits to policymakers.

62. **A new version of the UNIDROIT Principles on the Operation of Close-out Netting Provisions could help clarify the relation with other international instruments that have been adopted in the meantime**, such as the FSB Key Attributes of Effective Resolution Regimes (updated 2024). It could be more precise as to the types of firms that should be covered. It should be considered whether close-out netting arrangements should also be recognised in other industries, such as energy and commodity markets, as is already envisaged in some jurisdictions.[18] A new version could also engage with academic criticism of the Principles by highlighting the essential function and benefits of close-out netting clauses for the general weal.

63. **A further suggestion for the future would be to adopt a Legislative Guide on close-out netting, in addition to, or as a replacement of, the Principles**. The Principles mainly state in the negative what the legislator should avoid (*e.g.*, making the operation of close-out netting provisions dependent on a formal act or imposing enforcement conditions that are not foreseen in the provision itself). This guidance could be turned into more concrete, positive formulae, which could assist national legislators in countries that have yet to reform their law to draft the respective provisions.

III. UNIDROIT PRINCIPLES ON DIGITAL ASSETS AND PRIVATE LAW

A. Development and adoption

64. The UNIDROIT Principles on Digital Assets and Private Law ("DAPL Principles") were adopted by the Governing Council at its 102nd session (May 2023) and published in October 2023. They were developed through an inclusive process involving the work of almost 30 experts in private and technology law and with the input of over 50 institutional observers from international, governmental, industrial, regional, and non-governmental organisations, as well as of a Steering Committee composed of representatives of 27 UNIDROIT Member States and one Regional Economic Integration Organisation (the European Union by way of the European Commission).

B. Purpose

65. Recent years have seen a rapid development of assets existing in a digital form, largely based on distributed ledger technology, including blockchain technology. The DAPL Principles were developed to provide guidance to States on principles of private law recommended to govern certain aspects of transactions involving such assets. The development of digital assets has raised

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[17] On the Supreme Court judgment, the circular and the law reform, see Matthias Lehmann, Lucas Flöther and Elke Gurlit, "Die Wirksamkeit von Close-out-Netting-Klausen in Finanzderivatverträgen nach § 104 Abs. 2 InsO n.F.", Wertpapier-Mitteilungen 2017, p. 597.

[18] See Art. 7(6) Directive (EU) 2019/1023 on preventive restructuring frameworks, on discharge of debt and disqualifications, and on measures to increase the efficiency of procedures concerning restructuring, insolvency and discharge of debt, and amending Directive (EU) 2017/1132, [2019] O.J. 172/1 (allowing Member States to exclude (close-out) netting arrangements on financial markets, energy markets and commodity markets from a stay of individual enforcement actions after the opening of negotiations of a preventive restructuring framework).

uncertainties as to their treatment in private law. This uncertainty owes to their very nature. In many ways they are similar to other types of assets, and existing private law can govern many issues arising from transactions involving digital assets. However, there are some differences that could potentially lead to gaps in the law, legal uncertainty, and fragmentation of private-law responses across States. The DAPL Principles provide certainty as to how private law should deal with these issues while clarifying that existing other national law applies to all other issues.[19]

66. The DAPL Principles, therefore, represent a somewhat different approach from that of some other UNIDROIT instruments. Given the lack of established rules and practice in this field, the DAPL Principles represent an original attempt at creating, and not merely identifying, international legal standards on the specific aspects mentioned above, based on the work of experts from all representative legal families and systems.

67. The DAPL Principles are designed to be jurisdiction neutral. It is therefore up to a State how it should implement them: either by special legislation, amendment of existing legislation, or judge-made law. In many cases, at least some of the Principles are likely to already be part of a State's law, in which case the action that would be required to implement them would be limited. Even in that case, however, the DAPL Principles and their commentary are likely to assist in the interpretation of the (consistent) rules of the relevant State and their application to factual situations.

C. Key content

68. The scope of the DAPL Principles is limited to digital assets that are capable of being subject to control. The Principles cover issues related to private international law, control and transfer, custody, secured transactions, procedural law including enforcement, and insolvency.

69. The DAPL Principles provide definitions of key concepts, which are then used in the formulation of a relatively small number of actual rules, and which provide criteria as to when the rules apply. For example, the concept of "control" is defined in Principle 6. It is a factual concept, consisting of three factual abilities. The concept of control is used in the definition of "digital asset" (Principle 2), thus limiting the scope of the Principles to electronic records that are capable of being subject to control.

70. The first, and most important, rule of the Principles is that a digital asset can be the subject of proprietary rights (Principle 3(1)). This rule is a fundamental basis of law that enables digital assets to be of commercial value and to be used in the same way as any other asset. From this Principle flows the conclusion that a proprietary right in a digital asset survives the insolvency of any relevant party, such as the owner, a custodian, or a secured creditor.[20] The conclusion in this key Principle is based on the fact that a digital asset, as defined, is identified, individuated, rivalrous, transferable, and controllable.

71. A State could be said to have "implemented" that Principle if assets falling within the Principles' definition of digital assets are, under that State's law, capable of being the subject of proprietary rights. The nature of the relevant proprietary rights would be likely to vary from State to State. The same analysis as to implementation applies to all the substantive rules of the Principles. The first of such rules is the innocent acquisition rule in Principle 8, which provides that an acquirer who takes control of digital assets in good faith takes free of conflicting claims. The second group of rules are those applying to custody, particularly the rule in Principle 13(2) that digital assets maintained by an insolvent custodian for a client do not form part of the assets available for

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19 DAPL Principles (2023), Principle 3(3) and 3(4).

20 *Ibid*., Principle 19.

distribution to its creditors. The third group of rules relate to security rights, particularly the rule in Principle 15 that a security right in a digital asset can be made effective against third parties by control.

72. Two other Principles deserve special mention. The first is Principle 5, which provides a waterfall of rules to determine the governing law in relation to proprietary issues in respect of a digital asset. At the bottom of this waterfall are the private international rules of the forum State, and these rules also apply to issues that are not proprietary. The second is Principle 4, which does not provide a rule at all, but states that a digital asset can be linked to another asset, in which case other law applies to the existence of, requirements for, and legal effect of, any such link. The Commentary to Principle 4 includes some detailed examples of where the nature of such a link can be uncertain and the types of national law rules that will enable that nature to be determined. One example of a linked asset is the situation where a digital asset (as defined in the Principles) is legally linked to a right or an asset in the same way that a piece of paper can be legally linked (for example, a negotiable instrument, a document of title to goods, or a warehouse receipt).[21] Legislation would generally be necessary for such a link to take effect under national law, such as legislation implementing the UNCITRAL Model Law on Electronic Transferable Records (MLETR), since a linked digital asset could be the electronic equivalent of a transferable paper document or instrument. It is likely, however, that some types of electronic transferable records falling within the Model Law would not fall within the definition of digital assets in the DAPL Principles. The Commentary to Principle 3 discusses the relationship between legislation implementing the MLETR and Principles law and suggests that States aim for consistency wherever possible.[22] Another example is 'digital securities', in which a security (such as a share or bond) is linked to a digital asset or is recorded on a blockchain register. Such securities have become increasingly common in many jurisdictions.

73. In every case, the question whether the digital asset is sufficiently linked to the other asset, so that transfer of the digital asset leads to transfer of the other asset is a matter of private law and, as mentioned above, is left up to 'other law' in the Principles. While the techniques for linking wil vary between jurisdictions, there could be scope for UNIDROIT to provide some general guidance in the future.

D. Impact

1. Implementation and Application

74. The DAPL Principles are soft law. They are not intended to be enacted verbatim by a State. As mentioned above, a State's law may already be consistent with parts, or even all, of the Principles. In these States, it is not necessary to legislate specifically since their law, or aspects of it, already reflects what the Principles say.

75. For example, court decisions (largely preceding the DAPL Principles) have confirmed that digital assets could be the subject of proprietary rights under the relevant national law, which was thus consistent with Principle 3(1). The High Court in New Zealand held in 2020 that digital assets could be property and therefore could be held on trust,[23] and the High Court in Singapore came to a similar conclusion in 2023,[24] based in part on some amendments to the Court rules.[25] Judges in the UK have also held in a number of cases dating from 2019 that digital assets can be the subject of

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21 See Commentary 4.22.

22 See Commentary 3.8.

23 *Ruscoe v Cryptopia Ltd.* [2020] NZHC 728 [133].

24 *ByBit Fintech Ltd v Xin* [2023] SGHC 199.

25 Ibid. [30].

proprietary rights.[26] This conclusion is consistent with the report of the Law Commission of England and Wales, which acknowledges the importance of consistency with the DAPL Principles. A Chinese court held in 2019 that Bitcoin had the attributes required of an object of property rights and should therefore be recognised as virtual property protected by law.[27]

76. Legislation preceding the DAPL Principles may also be consistent with them to a greater or lesser extent, such as UCC Article 12 in the U.S., Article 128 of the Russian Civil Code, and the Liechtenstein Blockchain Act 2019. Legislative intervention may be more likely in civil law jurisdictions, where the courts are less willing to expand the categories of subjects of proprietary rights.[28]

77. If the existing law has gaps or uncertainties, a State may choose to legislate using the DAPL Principles as a guide. There are already instances of this happening in relation to some parts of the DAPL Principles, though no State has yet specifically implemented the entire set of Principles by legislation.

78. For example, States have enacted legislation consistent with the DAPL Principle 3(1) (digital assets can be the subject of proprietary rights), Principle 6 (control), and Principle 8 (innocent acquisition). In March 2024, the Dubai International Financial Centre (DIFC) announced the enactment of a new Digital Assets Law (DAL) that addresses the legal characteristics of digital assets, including the proprietary nature of digital assets, as well as how digital assets may be controlled and transferred. Most notably, the approach to control in Article 10 of the DAL is based on Principle 6 of the DAPL Principles.[29] In 2026, the Scottish Parliament passed the Digital Assets (Scotland) Act 2026.[30] This Act recognises digital assets as incorporeal assets in Scottish private law, which means that they can be the subject of proprietary rights. The Bill adopts a control-based approach similar to that reflected in the Principles and introduces a take-free rule protecting good-faith acquirers who obtain control of a digital asset. It builds on the Principles in relation to the application of the Scottish law of property, by providing that control of a digital asset by a person raises a presumption of ownership, and enables existing law on the acquisition of ownership of tangibles to apply to digital assets, by (in this context) deeming digital assets to be corporeal property and exclusive control to be physical possession. The DAPL Principles were referred to a number of times in the Policy Memorandum supporting the Bill, as evidence of international standards with which the Bill should be (and is) consistent. [31]

79. Further, the Italian Decree-Law No. 25 of 17 March 2023 was drafted with the DAPL Principles in mind and includes a provision on innocent acquisition (Article 5, comma 4).

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[26] The main cases are: *AA v Persons Unknown* [2019] EWHC 3556 (Comm); *Fetch.AI Ltd v Persons Unknown* [2021] EWHC 2254 (Comm); *Tulip Trading v Van Der Laan* [2023] EWCA Civ 83. This conclusion has been bolstered by the UK Property (Digital Assets etc) Act 2025, available at https://www.legislation.gov.uk/ukpga/2025/29, which prevent the success in court of an argument that digital assets (or other assets) cannot be the subject of proprietary rights because they are not things in possession or things in action.

[27] See Wu v Shanghai Yaozhi Network Technology Co Ltd and Zhejiang Taobao Network Co Ltd, Hangzhou Internet Court, (2019) Zhe 0192 Min Chu No. 1626 (holding that Bitcoin had the attributes of property, including value, scarcity and controllability, and constituted virtual property protected by law).

[28] See, for example, the Decision of the Moscow Arbitrazh Court in case No. A40-124668/17-71-160 F, March 5, 2018 (bitcoin cannot be the subject of proprietary rights), overturned on appeal in the Decision of the Ninth Arbitrazh Court of Appeals No. 9AP-16416/18 in case No. A40-124668/17, May 15, 2018 on the basis that the Civil Code was about to be amended to include digital assets.

[29] See Digital Assets Law DIFC Law No. 2 of 2024, Article 10; see also DIFC Consultation Paper No. 4, September 2023, para 59.

[30] Digital Assets (Scotland) Act 2026, available at https://www.legislation.gov.uk/asp/2026/12/contents . The Bill has passed the requisite stages in the Parliament and requires Royal Assent to become an Act.

[31] See Digital Assets (Scotland) Bill, Policy Memorandum SP Bill 75–PM, available at https://www.parliament.scot/-/media/files/legislation/bills/s6-bills/digital-assets-scotland-bill/introduced/spbill75pms062025.pdf

80. Much of the legislative activity in relation to digital assets since the DAPL Principles were adopted has been in relation to regulatory law, focusing primarily on licensing, prudential oversight, market conduct, consumer protection, anti-money laundering measures, and the regulation of stablecoins.[32] While potentially influential, the DAPL Principles do not appear to have had a specific influence on such legislation. The need for private-law reform in many countries, is, however, recognised by influential international bodies.[33] The DAPL Principles can be an important component in these reform initiatives, by exemplifying international standards and acting as a checklist for the minimum content of reformed law.[34] For an analysis of how the DAPL Principles can supplement regulatory law and help fill private-law gaps in relation to digital assets, see Annexe 3 (Regulation and Law on Virtual Digital Assets in India and the UNIDROIT DAPL Principles, by Prof. Risham Garg).

2. Engagement[35]

81. Even if there is no direct evidence of implementation, the DAPL Principles still have impact if they are being raised in discourse, whether by Governments, legal practitioners, judges, or academics. The Secretariat has engaged with such stakeholders and raised awareness of the DAPL Principles at relevant industry, academic, and institutional fora across the globe (*e.g.*, Argentina, India, Italy, Japan, People's Republic of China, Serbia, Spain, Switzerland, United Kingdom).

82. In October 2024, the National Conference on Civil Law of Argentina, the most significant scientific event in Argentine private law, recommended the dissemination and application of soft-law instruments, in particular, the DAPL Principles.[36]

83. In August 2024, the General Office of the CPC Central Committee and the General Office of the State Council of China released "Opinions on the reform, Innovation, and Development of Digital Trade". The document outlines 18 specific measures in areas such as supporting the development of digital trade and business entities, promoting institutional openness in digital trade, improving the digital trade governance system, and strengthening organisational safeguards. Among these measures, Article 9 states that China will actively participate in the formulation of international rules for digital trade. This includes engaging in negotiations on commercial rules for the digital economy within organisations, with express reference to UNIDROIT.[37]

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[32] Examples of regulatory legislation include: the Corporations Amendment (Digital Assets Framework) Bill 2025 in Australia; Resolutions BCB 519, 520, and 521 in Brazil; Regulation (EU) 2023/1114 on Markets in Crypto-Assets (MiCA) and the Transfer of Funds Regulation in the European Union; the Virtual Asset Service Provider licensing regime in Hong Kong under the Securities and Futures Ordinance (Cap. 571) (SFO) and the Anti-Money Laundering and Counter-Terrorist Financing Ordinance (Cap. 615) (AMLO); amendments to Japan's Payment Services Act and stablecoin framework; the Investments and Securities Act (ISA) 2025 (No. 2 of 2025) in Nigeria; the stablecoin framework deeloped by the Monetary Authority of Singapore; the Act on the Protection of Virtual Asset Users in South Korea; Türkiye's Law No. 7518 on Crypto Assets and secondary legislation the regulatory framework; Law No 4 of 2022 Regulating Virtual Assets in the Emirate of Dubai, United Arab Emirates; the Financial Services and Markets Act 2000 (Cryptoassets) Regulations 2026 in the United Kingdom; the GENIUS Act (Guiding and Establishing National Innovation for U.S. Stablecoins) in the US.

[33] See IMF Policy Paper "Elements of Effective Policies for Crypto Assets" (2023) at para 45, citing the DAPL Principles fn 40, at https://www.imf.org/en/Publications/Policy-Papers/Issues/2023/02/23/Elements-of-Effective-Policies-for-Crypto-Assets-530092. For a targeted national law example, see the IMF Technical Assistance report on Kenya Crypto Regulation and Legislation (December 2024) paras 30–31 at https://www.imf.org/en/publications/technical-assistance-reports/issues/2025/01/08/kenya-technical-assistance-report-crypto-regulation-and-legislation-560702.

[34] See, for example, the Scottish policy paper at fn 28, para 33.

[35] For a non-exhaustive list of events in which the DAPL Principles have been discussed, see Annexe 1 to this White Paper.

[36] https://www.uNIDROIT.org/wp-content/uploads/2024/10/Comision-9.pdf.

[37] http://www.news.cn/politics/20241128/f01178ac99214d628fd191a6c14b83ea/c.html.

84. In March 2025, the IMF published a paper on the "Private Law Aspects of Token-Based Central Bank Digital Currencies", which provides guidance on transactions in digital assets and specifically takes account of the work performed by UNIDROIT in this area.[38]

85. In August 2024, the Asian Development Bank (ADB) addressed key aspects of the DAPL Principles in a specially dedicated issue of its Cross-Border Settlement Infrastructure Forum (CSIF) Brief.[39] The ADB CSIF is a programme under the Asian Bond Markets Initiative (ABMI) that aims to enhance financial market infrastructure in the region of the Association of Southeast Asian Nations plus the People's Republic of China, Japan, and Republic of Korea.

86. UNIDROIT has cooperated with the EU-funded Digital Assets Roundtable Expert Series (DARTE) to run two expert workshops on the DAPL, focused on countries that are developing legislation in relation to digital assets. One workshop focused on civil law jurisdictions and the other on common law jurisdictions.

87. Engagement with Principle 5 merits special mention. The HCCH has a project on Private International Law issues of Digital Tokens,[40] in which an expert group has been formed. In the discussions so far at the HCCH, the Permanent Bureau has consistently taken the position that any resulting HCCH instrument would not contradict or be inconsistent with Principle 5, although some participants in the discussions have expressed concern about that position. Several participants have supported the development at the HCCH of some connecting factors for the applicable law that would provide additional guidance at the bottom of the Principle 5 waterfall. The content of Principle 5 has been both praised[41] and departed from[42] in national discourse around this issue.

88. The DAPL Principles have also informed the ongoing work of the Conference on European Restructuring and Insolvency Law (CERIL). In the context of Working Party 16 on Crypto-assets in Restructuring and Insolvency II, which is examining the implications of the Markets in Crypto-assets Regulation (MiCAR) for EU insolvency law, CERIL has considered the approach adopted by the DAPL Principles to insolvency-related issues concerning digital assets, including custodial arrangements, asset segregation, and shortfall mechanisms.

89. There has also been considerable academic engagement with the DAPL Principles in many parts of the world.[43] The DAPL Principles have been presented at academic conferences and to university students in numerous countries.

E. Recommendations for the future

90. The DAPL Principles are relatively new, and the work done to publicise them is ongoing and needs to continue. Much has been done already by UNIDROIT and by those experts and States that were involved in drawing up the Principles to introduce them to many different audiences, including Governments, international organisations, industry, legal practitioners and judges, and academia. It

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38 https://www.imf.org/en/Publications/fintech-notes/Issues/2025/03/14/Private-Law-Aspects-of-Token-Based-Central-Bank-Digital-Currencies-565165.

39 https://www.adb.org/publications/UNIDROIT-principles-digital-assets

40 https://www.hcch.net/en/projects/legislative-projects/digital-tokens1.

41 https://fmlc.org/wp-content/uploads/2024/06/Report_Digital-Assets-Governing-Law-and-Jurisdiction.pdf and https://fmlc.org/wp-content/uploads/2025/09/FMLC__Letter_Law-Com_Consultation-Response-.pdf.

42 http://cdn.websitebuilder.service.justice.gov.uk/uploads/sites/54/2025/06/Digital-assets-conflicts-CP-2025.pdf.pdf

43 For examples, see Annexe 1 to this White Paper.

is not the moment for a radical change in approach, as engagement, and even implementation, is continuing to grow.

91. **One possible strand of the approach for the future would be to target Governments in jurisdictions that have introduced, or are introducing, regulatory law in relation to digital assets**, on the grounds that such regulatory law needs to work in tandem with a clear and consistent private-law regime.[44] **Another possible strand is to target industry and lawyers in such jurisdictions**, who can put pressure on Governments to provide such a private-law regime.

92. **Another possible approach would be to try to identify jurisdictions where the current private law does not deal with digital assets or where the current provision is poor**. This approach is excellent in theory but could prove difficult in practice.

93. **Targeting international organisations that advise States on private-law reform** (such as the IMF and regional development banks) is an ideal approach: this activity is already taking place and needs to be continued.

94. **One of the strengths of the DAPL Principles is that they are designed to be very adaptable to take account of legal tradition, existing legal concepts, and different methods of implementation.**[45] **It is very important that this strength be made clear to States**, as it will demonstrate that the Principles can be used in reforming a State's private law in relation to digital assets, while enabling that State's law to remain internally consistent to its legal tradition and principles.

95. The importance of digital securities and the emergence of other linked assets in the financial markets is such that **UNIDROIT could consider a future project giving guidance as to the private law concerning linked assets, including the possible nature of the link, transfer, security rights and custody.** In relation to digital securities, it could be worth considering whether the Geneva Securities Convention could be supplemented or whether a new instrument would be appropriate.

IV. UNIDROIT LEGISLATIVE GUIDE ON BANK LIQUIDATION

A. Development and adoption

96. The UNIDROIT Legislative Guide on Bank Liquidation was adopted by the Governing Council at its 105th session (May 2025), following work done over three years by a Working Group coordinated by UNIDROIT in partnership with the Financial Stability Institute (FSI) of the Bank for International Settlements (BIS). The Working Group was comprised of international experts in the field of insolvency law and bank failure management, with input from 40 institutional observers consisting of international and regional bodies and organisations, banking supervisors, deposit insurers, and resolution authorities from all over the world, totalling over 120 accredited participants.

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[44] See, *e.g.*, IMF Policy Paper "Elements of Effective Policies for Crypto Assets" (2023) at para 45, citing the DAPL Principles fn 40, at https://www.imf.org/en/Publications/Policy-Papers/Issues/2023/02/23/Elements-of-Effective-Policies-for-Crypto-Assets-530092.

[45] See Introduction 0.6-0.9 and commentary 2.18-2.19. See also Justice Jackman, "What Has Taxonomy Ever Done For Us? UNCITRAL's 2023 "Taxonomy of Legal Issues Related to the Digital Economy" 2024 United Nations Day Lecture, UNCITRAL National Coordinating Committee for Australia, 9-10, which makes this point.

B. Purpose

97. The Guide mainly aims to support legislators and policymakers in developing effective legal frameworks for liquidating banks that do not necessarily have a systemic impact in failure. It complements global reform efforts post-Global Financial Crisis to end the risk of "too big to fail", particularly the FSB Key Attributes of Effective Resolution Regimes for Financial Institutions, which has become the international standard for resolving banks and other financial institutions, the failure of which could have systemic impact. The Guide complements the FSB Key Attributes by focusing on the orderly liquidation of banks that are *not* systemically significant or critical at the point of failure, as well as the wind-down of specific parts of a bank during or after resolution. It also complements instruments developed by UNCITRAL and the World Bank in insolvency law, as those instruments are aimed at resolving cross-border insolvencies, but were not designed to be applied to banks specifically.

C. Key content

98. The Guide is structured into ten Chapters, each addressing a specific thematic area and relevant key issues, as well as recommendations for legislators and policymakers. In total, the Guide contains 105 recommendations, which serve as a practical checklist for designing an effective bank liquidation framework. While it does not prescribe the level at which these recommendations should be implemented, many would be best included in primary legislation.

99. Chapter 1 introduces the Guide's purpose and scope. The chapter recognises that banking sectors and the legal frameworks for bank failure management differ across jurisdictions. It seeks to accommodate such differences and offer guidance that can be implemented in any jurisdiction in a way that takes account of local specificities. The chapter discusses single-track regimes, which are a single framework for dealing with any bank failure, and dual-track regimes, where resolution and liquidation are distinguished. The Guide sets out aspects that should be specifically addressed in a bank liquidation framework, irrespective of the chosen legislative approach. Chapter 2 addresses institutional arrangements. A key feature is that a bank liquidation proceeding could be managed by an administrative authority (administrative model) or by a court with strong involvement of the relevant banking authorities (court-based model with administrative involvement). Irrespective of the model, a strong role for the relevant banking authorities is needed. The Guide provides a carefully-crafted analysis of the pros and cons of administrative models and predominantly court-based models. Instead of opting for a complete preference for one or the other, the Guide underscores the essential role that administrative agencies (*e.g.*, resolution or liquidation authorities, banking supervisors) must play in every system, and it identifies the features of models that a country opting to keep substantial court involvement (due to path dependency or constitutional constraints) should in any case not do without.

100. Chapter 3 focuses on procedural aspects of liquidation. In particular, an administrative authority should have the right to initiate or seek opening of a bank liquidation proceeding, and where others have such a right, the administrative authority should at least be heard before any order is granted. The usual procedural rights of creditors should be modified under the bank liquidation framework where the exercise of those rights could materially undermine the objectives of the framework.

101. Chapter 4 deals with the importance of preparation and contingency planning. The legal framework should enable an appropriate level of preparation and cooperation among the relevant authorities (such as the supervisory authority, resolution authority where different from the former, and deposit insurance scheme) to facilitate advance preparation for the process and enable a swift payout of insured depositors. Chapter 5 covers the grounds for initiating bank liquidation proceedings. It suggests that the grounds for opening a bank liquidation proceeding should be broader than those

for other businesses and ideally include a forward-looking element to allow timely action, prevent unnecessary destruction of value, protect depositors, and enable a smooth liquidation of residual parts of the failed bank as part of a resolution process.

102. Chapter 6 offers guidance on liquidation tools and powers. Piecemeal liquidation of a bank will often destroy value and disrupt depositors' access to their deposits, which may have broader adverse effects. The legal framework should therefore allow the transfer of the non-viable bank's deposits and other suitable liabilities – with available assets – to another entity. Chapter 7 discusses the role of deposit insurance funds. Bank failure management in most cases requires funding in excess of the bank's own available liquid resources. Bank-specific sources of funding, in particular the deposit insurance fund, may play an important role in ensuring orderly liquidation of non-viable banks. Chapter 8 covers creditor hierarchy and ranking of depositor claims. The chapter recommends that the creditor hierarchy applicable in a bank liquidation proceeding should be clearly set out and reflect the specificities of banks. In particular, a privileged ranking for insured depositors facilitates transfer strategies, which protect depositors by providing continued access to their deposits.

103. Chapter 9 addresses the liquidation of banks that operate in a group structure and may be interconnected within the group, both financially and operationally. The legal framework should clearly set out the treatment of pre- and post-liquidation intragroup financing and grant administrative authorities the appropriate means to ensure coordinated actions among liquidators for group entities. Chapter 10 discusses cross-border bank liquidation. It recognises that both single entities and banking groups may have cross-border activities and the legal framework should allow for effective cross-border cooperation, coordination, and exchange of information. It should facilitate the recognition of foreign proceedings, with due respect for safeguards such as the non-discriminatory treatment of creditors.

104. In sum, the Guide identifies tensions in key areas in bank insolvency and provides relevant considerations for thinking through liquidation issues, and then includes guidance on how identified issues may best be addressed.

D. Impact

1. Implementation and Application

105. Due to its recent adoption in May 2025, public assessments (positive or negative) of the Legislative Guide remain limited but are encouraging.[46] A holistic evaluation of its strengths and weaknesses is therefore premature. However, it is possible at this stage to observe a number of strengths and weaknesses.

106. The Guide fills a gap in the international architecture for bank failure management. Guidance on how to design an effective bank liquidation framework was absent at the international level; also at the national level, specific frameworks for bank liquidation are often lacking. The UNIDROIT Legislative Guide could therefore assist legislators, regulatory authorities, and practitioners in their efforts to effectively deal with failing banks. More specifically, the Legislative Guide could be helpful

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[46] A Chinese scholar who provided support to UNIDROIT in developing the Guide published an article in 2024: Shuai Guo, "Resolution or *Liquidation* for *Banks*? A Tool-Based Proposal for Single and Double-Track Regimes", *Journal of Business Law 2024,* Issue 8, 620-634. Furthermore, the Legislative Guide has been regarded by the editors and several contributors to a recent comparative volume as an important benchmark for comparative analysis and a source of legislative inspiration, particularly for the reform of Spanish bank insolvency law. See Colino Mediavilla JL, Freire Costas RM, González Vázquez JC and Juez Hervás LF (eds*), La liquidación de entidades de crédito en un procedimiento de insolvencia* (Servicio de Publicaciones de la Facultad de Derecho. Universidad Complutense de Madrid 2025) <https://docta.ucm.es/entities/publication/2100e294-f9cd-40a1-a33c-99cb82fa1a0e>.

for legislators and regulatory authorities as it defines the key objectives of an effective framework for bank liquidation. Moreover, the Guide undertakes a comparative assessment of court-based and administrative-based systems and offers guidance on baseline principles and effective tools for each. The Guide offers practical insights into effective procedures for commencing and conducting liquidation, including ensuring clear mechanisms for preparation and contingency planning, and recognising creditor and other stakeholder rights and interests.

107. The Legislative Guide provides helpful guidance on tools to liquidate failing banks, such as transfer of assets and liabilities to another bank or sale as a going concern. Also, it provides criteria for initiating bank liquidation proceedings and deals with financial contracts. Importantly, it addresses the priority order of creditors, which is especially complex in bank liquidation because of the position of deposit insurance schemes. The Guide's analysis on this issue is also relevant in the resolution of banks (the mechanism for which many jurisdictions have implemented detailed rules over the last decade), which takes creditor hierarchy in liquidation as a starting point.

108. Many medium-sized and smaller banks are part of corporate groups that are systemically important at the regional level. The Guide provides guidance on overcoming obstacles to the effective liquidation of banks that are part of an enterprise group. The cross-border chapter offers helpful recommendations on enhanced coordination between authorities and courts involved in liquidating different group entities across borders. It provides guidance on international cooperation, the recognition of foreign proceedings and supportive measures, and safeguards to ensure a fair and effective cross-border process.

109. One potential area for further consideration concerns the interplay between liquidation and other bank failure management frameworks. The Guide focuses on aspects of bank liquidation that fall outside the scope of the FSB Key Attributes and do not concern supervision, with "liquidation" being understood broadly to include sales as a going concern. The Guide also addresses the liquidation of parts of a bank in the context of, or following, resolution action. Nevertheless, given that recovery, resolution, and liquidation frameworks may operate in sequence or overlap, further guidance could usefully have been provided on the interaction between these different regimes, including in situations where parts of a bank are liquidated during or following resolution. The Guide does, however, recommend clear coordination between resolution and liquidation conditions.

110. Second, the Guide addresses banks only. However, many of the supervisory frameworks developed internationally also cover insurance companies and other financial institutions as they form part of the financial sector and are often excluded from commercial insolvency frameworks. The Committee welcomes the fact that the insolvency of insurers will be addressed in a follow-up project commencing later in 2026 (see Part Two, Section III, below).

111. Finally, the Guide is of a non-binding nature, which may be viewed as a strength or a weakness. While its non-binding nature may be beneficial to swift adoption, it lacks the binding force of a treaty, which could be problematic where it regards mandatory rules, such as those regarding creditor hierarchy. On the other hand, its non-binding nature provides a flexible framework that avoids being prescriptive in areas in which States might wish to make different choices.

112. Since the Legislative Guide on Bank Liquidation is a soft-law instrument, it provides legislators and policymakers with flexibility to draw on those aspects and options of the Guide that they consider most relevant and appropriate for their specific jurisdiction. At the time of writing, it is too early to identify States that have implemented the recommendations of the Guide explicitly by reference to it in their national legal frameworks. Nevertheless, authorities in several jurisdictions have expressed strong interest in the Guide, and some jurisdictions' laws may already be broadly consistent with certain of its recommendations. That is not surprising, as the Working Group that developed the Guide assessed a range of bank liquidation approaches worldwide to assist in

identifying the most effective elements of bank liquidation regimes. The Guide, however, is not intended to endorse the legal frameworks or existing practices of any particular jurisdiction.

113. By way of illustration, two key recommendations of the Guide are (i) to provide for an explicit legal power to transfer the assets and liabilities of a failing bank to a healthy institution as part of the liquidation process, and (ii) to allow the deposit insurance fund to facilitate such a transfer as an alternative to deposit payout. The benefits of a transfer for non-systemic bank failures as an alternative to a "piecemeal" liquidation are increasingly recognised across the world. Jurisdictions that already provide for a transfer power include Argentina, Brazil, Canada, Colombia, Ghana, Greece, Italy, Japan, Malaysia, Moldova, Nigeria, Paraguay, Switzerland, Ukraine, and the United States. In many, though not all, of these jurisdictions, the deposit insurance fund may be used to facilitate the transfer.

2. Engagement

114. Early in UNIDROIT's development of the Legislative Guide, a 2023 *Banque de France* Bulletin that called for harmonisation of existing bank insolvency regimes across the EU referred to UNIDROIT's then-ongoing work on the Guide as an important resource to consider when work on harmonising European bank insolvency regimes commenced.[47]

115. Before its adoption, the draft Guide was already presented to key stakeholders, including legal practitioners, academics, and senior officials of supervisory and resolution authorities, central banks, and deposit insurers. For example, in June 2024, the draft Guide was discussed at the annual Global Conference of the International Insolvency Institute in Singapore. In December 2024 and January 2025, the main policy lines of the draft Legislative Guide were discussed at high-level meetings organised by the BCBS and the FSI in Abu Dhabi and Cape Town (in cooperation with the Arab Monetary Fund and the South African Reserve Bank, respectively). In January 2025, key aspects of the draft Legislative Guide were presented to experts from European Parliament staff, with a focus on how the Guide can complement the CMDI review.[48]

116. Since the Guide's adoption by the UNIDROIT Governing Council in May 2025, the Secretariat has undertaken various activities as part of a strategy to create awareness around the Guide, as well as to increase its use around the world. The strategy involves (i) dissemination and public awareness campaigns, (ii) targeted presentations at key events, (iii) ensuring broad accessibility, (iv) supporting domestic implementation, and (v) monitoring and reporting on citations and implementation around the world and providing regular reports on its progress to the UNIDROIT Governing Council.[49]

117. The FSI continues to strongly support UNIDROIT in promoting the Guide. For instance, in July 2025, UNIDROIT and the FSI jointly organised a "Policy Implementation Meeting on Bank Liquidation", which was hosted at the BIS headquarters in Basel. The event brought together experts from public authorities with responsibilities for bank failure management, insolvency practitioners, and academics to discuss how the guidance provided in the Legislative Guide may be applied in practice across various legal systems and institutional arrangements. In October 2025, key aspects of the Legislative Guide were discussed during the "High-level meeting on Banking Supervision" in Port of Spain (Trinidad and Tobago), which was jointly organised by the Association of Supervisors of Banks

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47 Gossé J-B and others, 'Accélérer le processus d'harmonisation européenne du droit de l'insolvabilité pour renforcer l'intégration financière' (Bulletin de la Banque de France 2023) <https://www.banque-france.fr/system/files/2023-11/BDF249-3_Harmonisation-droit-insolvabilite.pdf>.

48 For a non-exhaustive list of events in which the UNIDROIT Legislative Guide on Bank Liquidation has been discussed, see Annexe 1 to this White Paper.

49 For the Secretariat's 2026 progress report to the UNIDROIT Governing Council, see UNIDROIT 2026 – C.D. (107) 19.

of the Americas (ASBA), the BCBS, and the FSI. The panellists from Guatemala, Jamaica, and Mexico, as well as other participants from the region, showed keen interest in the Legislative Guide.

118. Banking authorities from different jurisdictions have invited UNIDROIT to discuss the Legislative Guide. For instance, the Guide's recommendations and their potential impact on national legislation were discussed at a conference on the liquidation of banks at the *Banco de España* (Madrid) in June 2025. Spanish stakeholders are interested in reviewing their existing framework (a court-based insolvency regime with limited options). In October 2025, the Legislative Guide was presented at the EU Committee meeting of the European Forum of Deposit Insurers and, in December 2025, the Guide was discussed at a conference organised by the *Banca d'Italia* on "The Single Resolution Mechanism, ten years since".

119. The insolvency community has also demonstrated notable interest in the Guide. An introduction to the Legislative Guide on Bank Liquidation was included in the June 2025 issue of INSOL I-Read, a project run by INSOL Academics and targeting students globally, and INSOL and the International Insolvency Institute (III) released a joint podcast on the Guide.

120. In addition, the Legislative Guide has been presented at academic conferences and to university students in various countries (*e.g.*, Canada, China, Italy, Spain, Uganda, United Kingdom).

121. Early informal indications from Secretariat discussions with relevant stakeholders suggest that some jurisdictions (*e.g.,* India, Spain) are considering law reforms in the area of banking insolvency and may be guided by the recommendations contained in the Guide. China may also be considering strengthening its financial regulatory framework in line with international standards, including the principles outlined in the Legislative Guide.

E. Recommendations for the future

122. **Going forward, UNIDROIT's promotional and awareness creation efforts should not only be sustained but also amplified through participation in regional and international conferences and fora**. Also, presentations at meetings of the Basel Consultative Group, the FSB Regional Consultative Groups, and other such fora will go a long way to bring the Guide closer to countries that might find it helpful.

123. **Furthermore, plans for UNIDROIT to support in-country implementation by providing training on the Guide to countries on a demand-driven basis, and in collaboration with relevant partner organisations that routinely deliver technical assistance** programmes in bank regulation, insolvency, and crisis management, would make a great impact towards effective adoption by countries.

124. **One possible recommendation is a survey that would directly refer to key elements in the Guide, in order to identify jurisdictions where the recommendations align and to identify jurisdictions that could benefit from adoption of the principles and specific guidance**. As a first step to gather information on the use of the Guide, the FMT Committee advises that a follow-up survey be conducted with the experts and authorities that participated in the Working Group on Bank Insolvency. Country surveys were already undertaken to help develop the Guide; however, in their current form, they were not helpful in identifying to what extent jurisdictions' laws are consistent with the guidance offered in the Legislative Guide.

125. **A further recommendation is that UNIDROIT establish a committee of experts from different regions**, who could usefully provide up-to-date information on regional practices and possible law reforms relevant to the Guide and assist the Secretariat in actively monitoring

implementation and actively promoting the Guide, a strategy that has been effective for other instruments.

126. **The potential impact of the Guide remains promising.** Overall, it is a welcome addition to the toolkits of jurisdictions in managing bank failures, as it provides a well-thought-out and practical approach for dealing with non-systemic bank failures. The Guide highlights and balances the delicate nuances in institutional arrangements in various jurisdictions, insolvency law *versus* banking regulation dichotomies, and policy trade-offs that are often at play in banking crisis management.

127. **As more countries adopt the Guide and its recommendations, and as the global regulatory environment evolves, UNIDROIT should continue to review the Guide and bring relevant feedback and input on board to ensure that it is always fit for purpose**. Leveraging work done on the Guide, UNIDROIT's governing bodies have already approved for work to commence on a Legislative Guide on the insolvency of insurance enterprises (see Part Two, Section III below). There are potential opportunities to also explore work on the insolvency of other non-bank financial institutions, such as investment firms (where relevant, also building on other UNIDROIT instruments, such as those on Intermediated Securities and the Principles on the Operation of Close-Out Netting Provisions).

PART TWO — ONGOING AND NEWLY APPROVED PROJECTS

I. UNIDROIT DRAFT PRINCIPLES ON THE LEGAL NATURE OF VERIFIED CARBON CREDITS

A. Development

128. The UNIDROIT Principles on the Legal Nature of Verified Carbon Credits ("the VCC Principles") are being developed as Study LXXXVI through an inclusive process conducted by a Working Group that is expected to have held ten sessions by the end of 2026. The Working Group comprises experts in private law, carbon markets, and financial regulation, with input from institutional observers representing crediting bodies, market participants, governmental organisations, and non-governmental organisations. The project was initiated in response to uncertainties besetting the private-law treatment of Verified Carbon Credits (VCCs).

B. Background

129. Carbon markets encompass diverse mechanisms for channelling financial resources into climate change mitigation. Although they interconnect and function as a single ecosystem, from a private-law perspective, they divide into compliance and voluntary markets. Participation in the former is mandated and governed by regulation. Involvement in the latter is driven by climate and sustainability commitments that entities assume out of choice, whether to abate their own emissions or to finance mitigation achieved by others.

130. Compliance mechanisms take three principal forms: jurisdictional emissions trading schemes (ETS), sectoral frameworks such as the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), and emissions taxation schemes under which eligible credits may discharge part of the tax liability. The first of these operates through government-issued "allowances", which the legal frameworks creating them generally do not classify as property capable of being owned; as of September 2025, approximately 36 emissions trading schemes were operational globally, with several more in development. In many of them, eligible VCCs may be submitted to fulfil compliance obligations, whether alongside allowances or in their stead.

131. Voluntary carbon markets emerged in the 1990s as an effort led by non-State actors to certify greenhouse gas emission reductions and removals outside governmental compliance schemes. In these markets, VCCs are created under carbon crediting programmes administered by independent crediting bodies (e.g., Verra, the Gold Standard, the American Carbon Registry, and Climate Action Reserve). These bodies confirm that carbon mitigation projects have achieved such reductions or removals in accordance with predetermined standards and methodologies.

C. Purpose

132. **Fundamental private-law questions concerning VCCs remain unresolved in most jurisdictions:** their legal characterisation as property, the rules governing their transfer and acquisition, their eligibility as collateral, the duties of custodians holding them for clients, and their treatment in insolvency proceedings. These uncertainties deter project developers, investors, and other private entities, markedly constraining capital formation. Their consequences reach beyond private law, as the accounting and tax treatment of VCCs turns on that characterisation.

133. The purpose of the VCC Principles is to dispel this uncertainty. **They represent an original attempt at creating international legal standards on the private-law aspects of VCCs.**

D. Scope

134. The VCC Principles delimit their field of application through a definitional device. They apply to every unit that satisfies the definition of a "VCC", irrespective of whether the crediting programme under which it is created is administered by a private, governmental, or inter-governmental body, and of whether it serves a voluntary commitment or, where permitted, a compliance obligation. Units that fail that standard lie outside the Principles, whatever their market label. Compliance instruments ordinarily fall outside on this basis: allowances are *ex ante* permissions to emit created by regulation, not representations of an independently verified mitigation outcome already achieved. Accordingly, the VCC Principles do not extend to emission allowances traded in cap-and-trade systems or to other compliance units lacking the requisite elements; units generated under Article 6 of the Paris Agreement fall within the Principles only where those elements are present.

135. Even within their field of application, the VCC Principles address exclusively the private-law dimensions of VCCs. A comprehensive legal framework necessarily combines private law and regulatory components. While the VCC Principles provide guidance on proprietary rights, they **deliberately do not address the regulatory infrastructure that governs carbon markets**, including licensing requirements for VCC registries, authorisation frameworks for carbon mitigation projects, environmental compliance standards, or supervision of market participants. These regulatory matters remain within the sovereign authority of States and relevant international bodies; the Principles are designed to be neutral regarding, and compatible with, the diverse regulatory approaches that States may adopt. Within private law itself, a further limitation applies. The Principles leave intellectual property, consumer protection, and cognate subjects to national law.

E. Key Content

136. The VCC Principles provide **definitions of key concepts**, which are then deployed in the substantive rules. Central to the framework is the definition of a VCC as a "unit" that "represents" the fact that, as at the time of its creation, a mitigation outcome equivalent to one tonne of carbon dioxide has been achieved as a result of a greenhouse gas mitigation project; a "mitigation outcome" is the reduction, avoidance, or removal of greenhouse gas emissions. Four conditions must be satisfied for a VCC to exist: (i) a positive verification statement produced by an independent validation and verification body must attest that the mitigation outcome has been achieved; (ii) that statement must be approved by the relevant crediting body; (iii) the unit must be credited to an account in a VCC registry; and (iv) the unit must be individuated using a unique identifier. The term "unit" is itself defined as an intangible asset, thereby establishing the legal characterisation of VCCs from a property law perspective.

137. A VCC reifies the verified fact that a mitigation outcome had been achieved when the unit came into existence; it does not represent the mitigation outcome itself, nor its continuing existence, and ownership of a VCC confers no proprietary rights to the underlying environmental benefit. A mitigation outcome, standing alone, lacks the determinacy necessary to be the subject of proprietary rights. Once crystallised in a registered and individuated unit, the verified fact of its achievement acquires the determinacy that ownership requires.

138. The cardinal rule of the Principles is that a **VCC can be the subject of proprietary rights** (Principle 3(1)). This proposition supplies the legal foundation for VCCs to be owned, disposed of, and deployed in commercial transactions. Principle 5 provides that a VCC comes into existence upon crediting to a registry account and identifies the first holder of proprietary rights in it.

139. The Principles then set out t**ransfer rules for VCCs**. Principle 6 embodies the *nemo dat quod non habet* rule, whereby a person can transfer only the proprietary rights that it has in a VCC, if any, and no greater rights. Principle 7 subjects this baseline to an important exception: an innocent

acquisition rule enabling certain good faith acquirers to take VCCs free of conflicting proprietary rights, even where the transferor lacked title. To qualify, a transferee must (i) acquire the VCC from a transferor that is its registered holder at the time of transfer, (ii) have the VCC credited to their registry account, and (iii) satisfy good faith requirements that each State specifies by reference to its existing acquisition and take-free rules; gratuitous acquisitions do not qualify. This departure from the strict *nemo dat* regime that typically governs pure intangibles enables VCCs to circulate at higher velocity, facilitating capital formation and liquid secondary markets.

140. Principles 8-13 govern **retirement and cancellation**. Retirement (Principle 8) is the intended endpoint in the lifecycle of a VCC. By instructing the VCC registry to retire the unit, the registered holder counts the represented achievement towards a compliance obligation or voluntary commitment, and the VCC ceases to be capable of being the subject of proprietary rights. Cancellation (Principle 9) encompasses the processes by which a VCC otherwise ceases to exist or is determined never to have existed. Revocation (Principle 10) confines involuntary retroactive cancellation to two exhaustive grounds: deliberate wrongdoing in the verification, approval, crediting, or individuation of the VCC, and complete nullity of its creation; a VCC cancelled on either ground is treated as void from the outset. Overissuance (Principle 11) concerns the converse case, in which the constitutive acts genuinely took place but the mitigation outcome is later demonstrated, without deliberate wrongdoing, to have been overstated at creation. The VCC is not cancelled. This rule rests on policy rather than doctrine: retroactively invalidating honestly-created units would unsettle the markets in which they circulate. It operates exclusively on the plane of property law; the remediation arrangements of crediting bodies and registries remain unaffected, as do any regulatory consequences. In practice, crediting bodies may remediate overissuance through mechanisms such as buffer pools, and contractual remedies against the party responsible may be available under other law. Voluntary cancellation (Principle 12) and illegality (Principle 13) complete the architecture. The boundary between revocation and overissuance thus turns on the genuineness of the constitutive acts, not on the quantity credited. A different case is the reversal of a mitigation outcome after creation, as when sequestered greenhouse gases escape back into the atmosphere; reversal does not ground cancellation, for it affects the value of a VCC, not its existence.

141. Principles 14-19 turn to the **infrastructure through which VCCs are held**. Principles 14 and 15 define the VCC registry and articulate the duties of the registry operator, chief among them giving effect to the instructions of registered holders. Principles 16-19 establish a custody framework, recognising that many participants hold VCCs through intermediaries rather than directly. A custodian is an intermediary that undertakes by custody agreement to maintain VCCs for a client, whether as registered holder or through a sub-custodian. Custodians owe core duties that cannot be excluded by agreement, including safeguarding client VCCs, abstaining from unauthorised dispositions, and executing client instructions; an adaptation of the innocent acquisition rule protects clients acquiring through custodians (Principle 18). Most importantly, VCCs maintained by a custodian for a client are not available to satisfy claims of the custodian's creditors; in an insolvency-related proceeding of the custodian, client VCCs do not form part of the assets available for distribution (Principle 19).

142. Principles 20-25 address **secured transactions**. Since VCCs can be the subject of proprietary rights, they can also serve as collateral; the Principles confirm this capacity and remit security rights in VCCs to general secured transactions law, subject to asset-specific rules (Principle 20). Two such rules concern third-party effectiveness: a security right in a VCC can be made effective against third parties upon the secured creditor becoming its registered holder (Principle 21), or upon the conclusion of a control agreement under which the custodian or registry operator agrees to follow the secured creditor's instructions without further consent from the grantor (Principle 22). A security right made effective by either of these methods has priority over one made effective under the general rules of other law, regardless of temporal sequence (Principle 23). This non-temporal priority rule aligns with modern secured transactions law, which favours control-based methods for intangible assets. Enforcement is left to other law, with safeguards where the VCC is held through a custodian

or registry (Principle 24), and proprietary rights effective against third parties remain effective in insolvency-related proceedings (Principle 25).

F. Impact and engagement

143. As the project is ongoing, direct implementation cannot yet be measured. Nevertheless, **the project has already catalysed substantial international and national engagement**, signalling its emerging influence on the development of VCC legal frameworks.

144. The joint UNCITRAL-UNIDROIT study on the legal nature of verified carbon credits issued by independent carbon standard setters (document A/CN.9/1191), published in March 2024 and presented to UNCITRAL at its 57th session in June-July 2024, has established international recognition of the need for harmonised private-law treatment of VCCs.

145. **This international momentum is generating concrete responses at the national level.** Singapore, the United Kingdom, and various EU Member States have begun to examine how VCCs should be characterised under their private-law frameworks. In the United States, the Uniform Law Commission has established a Commercial Law Framework for Voluntary Carbon Credits Committee that is exploring the possibility of a Uniform Act addressing the private-law regime of VCCs.

146. The HCCH has initiated complementary work on conflict-of-laws issues for carbon markets. In March 2025, CGAP mandated the establishment of an Experts' Group to study the PIL issues arising from carbon markets, with an initial focus on the possible inclusion of an applicable law provision in the draft UNIDROIT Principles on Verified Carbon Credits. The HCCH Permanent Bureau actively participates as an institutional observer in the UNIDROIT Working Group and UNIDROIT representatives participate in the HCCH Experts' Group.

147. **The project has gained significant visibility through presentations at major international fora.** At the UNCITRAL Colloquium "Navigating the New Era of Digital Finance" held at United Nations Headquarters in New York on 20-21 February 2025, the draft UNIDROIT VCC Principles were presented as part of the climate change finance panel. Similarly, the project was featured at the American Bar Association Business Law Section Spring Meeting in New Orleans in April 2025, expanding awareness among U.S. legal practitioners.

148. **The World Bank is a key partner in this project,** co-hosting the Working Group sessions and providing substantive support. The Bank's annual State and Trends of Carbon Pricing reports, which have tracked carbon markets for two decades, document the rapid evolution of voluntary carbon markets. This partnership ensures the VCC Principles are informed by comprehensive market data and development finance perspectives.

149. Beyond these partnerships, **market participants and industry organisations engage actively as institutional observers in the Working Group, including major crediting bodies (Verra, Gold Standard)**, financial institutions, and climate finance organisations. Importantly, regulatory authorities from multiple jurisdictions follow the development of the VCC Principles closely, recognising that while this project focuses on private-law matters, its implementation will necessarily interact with regulatory frameworks. This broad participation keeps the VCC Principles attuned to market realities without sacrificing legal rigour.

G. Recommendations for the future

150. The VCC Principles are scheduled for finalisation in 2026, with several critical workstreams advancing in parallel. An iterated draft has been settled for consultation with States and stakeholders,

and the Working Group continues to refine technical provisions, particularly the treatment of revocation and overissuance.

151. **Implementation guidance** will be essential for States considering legislative adoption. Being soft law, the Principles can be implemented by statute, through judicial development, or as an aid to interpretation. The diversity of legal systems and existing carbon market frameworks requires flexible approaches that respect national legal traditions while achieving harmonisation objectives. States with active or emerging carbon markets would do well to take stock of their private-law treatment of VCCs now, in anticipation of the finalised instrument. Additionally, the Working Group is developing a dedicated annexe on the tokenisation of VCCs, as technological evolution may transform market infrastructure.

152. The rapid evolution of carbon markets and their increasing integration with compliance mechanisms underscore the **urgency of this work**. As voluntary carbon markets mature from nascent initiatives to indispensable climate finance infrastructure, legal certainty becomes paramount. The VCC Principles aim to provide the foundational private-law framework that enables this transformation while maintaining environmental integrity and market confidence.

II. PROJECT ON REGULATION OF DIGITAL RISKS THROUGH CIVIL LIABILITY LAW

A. Development

153. UNIDROIT received a proposal from the Federal Department of Justice of Germany for a project to establish principles for regulating digital risks under civil liability law.[50] Following the recommendation of the Governing Council,[51] the UNIDROIT General Assembly, at its 85th session (December 2025), approved the inclusion of this project in the Institute's 2026-2028 Work Programme with medium priority.[52] Preparatory work is being undertaken by the Secretariat with the view to commence this new project in the second half of 2026.

B. Purpose and Key Content

154. Digital risk, namely risk caused by digital systems and technnologies – including artificial intelligence (AI) and automated decision-making, recommendation engines, big data analytics, cyber and network technologies, blockchain-based systems and smart contracts – presents distinct features that challenge traditional civil liability legal tools. Such technologies and systems may give rise to physical damage, such as in accidents caused by autonomous vehicles; economic damage, as where decisions based on an erroneous algorithmic outputs lead to financial loss; or even moral damage, for example where software systems result in unlawful discrimination against particular groups. The complexity, opacity, and autonomy of many digital systems, combined with the multiplicity of actors involved, create challenges in determining causation and assigning liability. For example, algorithmic decisions may be unpredictable and opaque, making it difficult to determine the event of causation of the damage or to define the person(s) at fault for the action or the event that caused the damage. Often, multiple parties will be involved in the processing, decision, and implementation of an algorithmic decision: developers, deployers, users, platform operators, etc., raising complex questions regarding the attribution of liability.

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50 See UNIDROIT 2025 – C.D. (105) 4 rev., Annexe IV.

51 See UNIDROIT 2025 – C.D. (105) 32, para. 120.

52 See UNIDROIT 2025 – A.G. (85) 3.

155. This reality has led legislators around the world to try and clarify the applicability of existing civil liability frameworks, or to engage in legal reform to adapt their systems. Legislators are being confronted with a complex context, where they must not only legislate for an extremely wide-encompassing reality but must do so in a manner that does not pose liability as an obstacle to technological progress.

156. The project is envisaged to unfold in two stages. The first stage will focus on the development of a methodological framework, which might include a set of principles. It will involve (i) a comparative analysis of the current situation of digital risk scenarios, including the identification and mapping of real-world cases and an examination of their social, economic, and technological interconnection, and (ii) a detailed mapping of national, regional, and transnational legislative and regulatory approaches to digital risk and civil liability, with a view to identifying best practices. This phase has a strong methodological component and aims to provide legislators with guidance on the identification and assessment of the critical elements that should be considered when regulating liability for digital risks. It will also draw inspiration from the Economic Evaluation of International Commercial Law Reform: Framework and Guide (2026), developed under the auspices of the Cape Town Convention Academic Project. The outcome of this stage is expected to be a set of methodological principles designed to assist legislators in evaluating and designing liability regimes for digital risk.

157. The second stage of the project would consist of the development of substantive principles on civil liability for digital risk. Building on the findings of the first stage, the project would formulate principles capable of accommodating the diversity of legal traditions and approaches to liability. In accordance with established UNIDROIT practice, these principles would take into account differences in damages, standards of diligence, and methods for establishing causation and proof. While the initial stages can be developed by the Secretariat with a small group of experts and stakeholders, the final stage of the project, if approved by UNIDROIT's Governing Council, would necessarily be developed by a full Working Group composed of experts and observers.

C. Recommendations for the future

158. **It would be important for any future Working Group to consider the work being carried out by other international organisations**. For instance, since risk caused by digital systems and technologies might raise jurisdictional issues, the HCCH's work in this area should be taken into account (*e.g.*, its projects on Jurisdiction and on Digital Tokens).

III. PROJECT ON THE INSOLVENCY OF INSURANCE ENTERPRISES

A. Development

159. In response to the call for proposals for UNIDROIT's 2026-2028 Work Programme, the Italian Institute for the Supervision of Insurance (IVASS), Italy's supervisor for the insurance sector, presented a proposal for a project on the liquidation of insurance enterprises.[53] The proposal aims to mirror, for the insurance sector, the project on Bank Insolvency that UNIDROIT conducted together with the FSI and which resulted in the UNIDROIT Legislative Guide on Bank Liquidation (see Part One, Section IV). Following the recommendation of the Governing Council,[54] the UNIDROIT General Assembly at its 85th session (December 2025) approved the inclusion of this project in the Institute's

53 See UNIDROIT 2025 – C.D. (105) 4 rev., Annexe II.

54 See UNIDROIT 2025 – C.D. (105) 32, para. 90.

2026-2028 Work Programme with high priority.[55] At the time of writing, the Secretariat is undertaking preparatory work. The first session of the Working Group on the Insolvency of Insurance Enterprises will take place between 30 November-2 December 2026.

B. Purpose and Key Content

160. Similar to the objective of the Bank Insolvency project, this project aims to assist legislators and policymakers in designing effective frameworks for the financial distress of non-systemic insurance companies. The FSB Key Attributes of Effective Resolution Regimes were supplemented in 2014 to include guidance on the resolution of insurers. Because of their nature as a high-level document seeking to address systemic risk, also for insurers, the FSB Key Attributes focus on resolution regimes for larger institutions. They contain no detailed rules on the liquidation of non-systemic insurance entities. Similarly, in 2019, the International Association of Insurance Supervisors (IAIS) published the Principles on Insurance Resolution in the context of the Common Framework for the Supervision of Internationally Active Insurance Groups, but no specific solutions were envisaged for liquidation or for smaller insurance entities.

161. Therefore, international guidance on how to address the liquidation of insurance entities is lacking, and different approaches are adopted across jurisdictions. Building on the experience with the Legislative Guide on Bank Liquidation, it is envisaged that the project address topics such as (i) objectives, (ii) institutional models, (iii) procedural and operational aspects (including concerning the liquidator), (iv) preparation and cooperation, (v) opening of liquidation proceedings for insurers, (vi) liquidation tools, (vii) funding and the role of policyholder protection schemes, (viii) creditor hierarchy, (ix) groups, and (x) cross-border aspects. Of course, there are fundamental differences between insurers and banks, which would need to be reflected in a dedicated liquidation framework for insurers.

C. Recommendations for the future

162. **The Committee recommends focusing on the development of legislative recommendations to address the financial distress of insurers**. It suggests interpreting the term "liquidation" broadly in this context as including going-concern sale (similarly to the Legislative Guide on Bank Liquidation), merger with one or more other insurers, or piecemeal sale of assets to satisfy claims. A broad range of tools should be available to resolve the financial distress of insurers, including protection of insurance policyholders, run-off of long-tail liabilities, bridging coverage under insurance policies, the use of a bridge insurance company, merger with other insurers, and sector consolidation.

163. **Furthermore, the specific features of different types of insurers should be considered**. There are significant differences in both the financing and resolution of property and casualty ("P&C") insurance companies, which rely heavily on short-term financing and reinsurance, and life and health insurance companies, which have longer-term financing horizons and long-tail liabilities. Insurance policyholders, particularly for life and health insurance, should be protected by ensuring that coverage is continued and transferred to a viable entity with no gap in coverage, as monetary compensation often cannot compensate for a loss of coverage when the policyholder is trying to obtain replacement coverage at the price and amount of coverage held pre-insolvency.[56]

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[55] See R Davis et al, Financial Institutions in Distress: Recovery, Resolution, and Recognition (Oxford University Press, 2023), chapter 7.

[56] *Ibid*.

164. **The Committee emphasises the need to ensure timeliness, transparency, certainty, and predictability in proceedings addressing the financial distress of insurers**. With regard to funding, it suggests considering the role and functioning of insurance guarantee schemes in both recovery and resolution/liquidation. Regarding cross-border aspects, it suggests considering the need for comity and cooperation, and the challenges associated with assets being in one State and liaiblities in other States, plus risks of ringfencing by supervisors and liquidators of assets in a jurisdiction to favour domestic policyholders.

165. **The Committee also notes the growing convergence of financial services, with even medium-sized insurers now offering banking-type services in addition to insurance products. In light of this trend, it suggests that the Guide delve into some of the challenges associated with addressing the financial distress of these cross-over entities** and identify best practices. In addition, some insurers operate within broader financial groups that include banks or other financial institutions. The Guide should therefore consider how spillover risks arising from the distress of one group entity may affect other entities within the group, and discuss approaches to mitigating such contagion risks.

IV. PROJECT ON LEGAL AND REGULATORY ASPECTS OF INVESTMENT-BASED CROWDFUNDING (DEBT AND EQUITY)

A. Development

166. In March 2025, UNIDROIT received a proposal from the World Bank Group (WBG) concerning the Development of a Model Law or Legal Guide on Legal and Regulatory Aspects of Investment-Based Crowdfunding.[57] At its 85th session (December 2025), the UNIDROIT General Assembly, following the recommendation of the Governing Council,[58] approved the inclusion of this project in the Institute's 2026-2028 Work Programme with high priority.[59] The Secretariat is currently undertaking preparatory work with a view to commence the project in the second half of 2026.

B. Purpose and Key Content

167. Investment-based crowdfunding is a way for businesses to raise financing appealing to a large number of potential investors by using online platforms, where *ad hoc* investment instruments have been issued and can be "acquired". The issuance often consists of equity or debt securities, and, unlike in the case of other types of crowdfunding initiatives (*e.g.*, donations for social purposes or reward-based projects), investors participate seeking financial return in the form of dividends (when shares are issued) or interests (where the issue consists of debt securities). This "alternative" form of access to finance is particularly suited to small and medium-sized enterprises (SMEs), which may sidestep more traditional forms of financing by professional lenders that might impose onerous conditions to small entrepreneurs (*e.g.*, overcollateralisation, high interest rates).

168. Currently, there is strong fragmentation in legal frameworks for investment-based crowdfunding. While some countries and regions have implemented regulatory frameworks for this type of crowdfunding (*e.g.*, the United States, the European Union, China, Japan, Korea, and Singapore), many countries remain without any specific regulation (*e.g.*, a majority of jurisdictions in the Global South). Other countries provide solutions that are varied and not always consistent. The project seeks to assist countries in developing adequate legal frameworks governing investment-

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57 See UNIDROIT 2025 – C.D. (105) 4 rev., Annexe I.

58 See UNIDROIT 2025 – C.D. (105) 32, para. 78.

59 See UNIDROIT 2025 – A.G. (85) 3.

based crowdfunding, thereby enhancing the use of such tools and offering SMEs a much-needed additional channel to access finance.

169. The focus would be on private-law matters involved in investment-based crowdfunding, in the area of contract law, property law, corporate law, insolvency law, and liability.[60] UNIDROIT would work closely with the World Bank and possibly other organisations to coordinate with the regulatory aspects of the project.

C. Recommendations for the future

170. The FMT Committee took note of the analysis on the project on Crowdfunding undertaken by the parallel Workstream on Access to Credit (see White Paper on Access to Credit,) and has no additional observations or suggestions for the future.

60 See UNIDROIT 2025 – C.D. (105) 4 rev., para. 50.

PART THREE — AREAS FOR FUTURE WORK

171. Looking ahead, UNIDROIT's role in shaping harmonised private law at the international level for a fast-evolving, interconnected, and complex global financial system will be increasingly important. "Future-proofing" UNIDROIT's structures, tools, and processes will therefore be critical to position it strongly for the work ahead. The growingly close relationship with regulation necessitates rethinking the understanding of the term "private law" in UNIDROIT's mandate. It also requires strengthening the collaboration with public-law bodies such as the FSB, IMF, World Bank, BIS, and IOSCO.

172. New initiatives could focus on areas where current divergences are producing inefficient results. The Committee has identified six such areas.

A. Liability for misleading information in primary and secondary financial and crypto markets

173. A first area could be the different liability rules for misleading information on the primary and secondary financial and crypto markets. The current divergence between the rules governing this liability creates unequal conditions for market operators, uncertainty about the applicable law, barriers to market access, and a burden on collective actions by investors. Harmonisation in this area could define when a prospectus, white paper or *ad hoc* information is considered to be misleading, *i.e.*, what types of defects in the information provided should form the basis of liability. It could also delineate the scope of potentially liable persons, the standard of culpability, the required causality nexus, and the available remedies. In the process, UNIDROIT could also engage with another institution, such as IOSCO, which have engaged with the harmonisation of the rules on the content of prospectuses and white papers.

B. Standardisation of custodian terms for securities and digital assets

174. A second area worth considering is the standardisation of custodian terms for both securities and digital assets, which remain highly fragmented and opaque, and risk placing investors at a disadvantage. Uniform model standard terms could define fundamental duties of custodians and corresponding rights of investors, such as the duty to segregate the assets of the investor from those of the custodian and to make appropriate arrangements for the protection of investors' rights in the event of the custodian's insolvency. They could also foresee rules on re-hypothecation and the protection of the investors' assets against cyber-risks. By voluntarily adopting these model standard terms, custodians could signal their trustworthiness to investors. At the same time, industry practices could be harmonised, increasing the protection of investors and making it easier to choose among competing service offers.

C. Contractual arrangements for sovereign debt restructuring

175. A third initiative could concern the contractual arrangements for sovereign debt restructuring. The global financial system has come a long way in facilitating sovereign debt restructuring where debt is deemed unsustainable, including through the promotion of Collective Action Clauses (CACs) and Enhanced CACs, the G20 Common Framework for Debt Treatment Beyond the Debt Service Suspension Initiative, and a push for more transparency in debt contracts amid a rise in the use of confidentiality clauses to obscure sovereign debt liabilities.[61] The interplay of public law – governing

[61] See, for example, the Institute for International Finance's Voluntary Principles For Debt Transparency https://www.iif.com/Publications/ID/3387/Voluntary-Principles-For-Debt-Transparency and the IMF, World Bank, and OECD's efforts at making public debt more public *e.g.,* https://www.elibrary.imf.org/view/journals/007/2023/034/article-A001-en.xml. Also, Georgetown University and Queen Mary University of London's 's #Public Debt is Public Initiative https://publicdebtispublic.mdi.georgetown.edu.

sovereign debt at the domestic level, including provisions on how debt is authorised, managed, and reported – and private law – under which several innovative clauses have recently been written into restructured debt (such as climate-linked clauses or debt-for-nature swaps, value recovery clauses, governance-linked features, confidentiality clauses, and collateral features) – can sometimes complicate debt restructuring and cause inordinate delays. While the IMF reports that almost all new international sovereign bond issuances include enhanced CACs,[62] certain categories of sovereign debt do not yet have CAC-like features that facilitate collective acceptance of restructuring offers, further delaying restructuring episodes with consequences for restoring macroeconomic stability.[63]

As sovereign borrowing becomes more market-based and restructuring more dependent on contractual innovations, important questions arise regarding the future development and harmonisation of international private law to help promote flexibility in debt management as well as fiscal resilience. Examining these evolving contractual arrangements may reveal opportunities for developing internationally accepted principles or model rules that strengthen legal certainty while accommodating the unique public functions of sovereign borrowers and promoting transparency and accountability. More broadly, this line of inquiry offers an opportunity to consider whether the evolution of sovereign debt contracts reflects a wider transformation in the relationship between public authority and private law, including whether existing contractual frameworks remain fit for purpose in addressing systemic sovereign debt crises and how private law might better facilitate orderly, predictable, and equitable restructuring processes.

D. Private-law aspects of tokenisation

176. Tokenisation is an area that is currently hotly debated. In particular, the private-law aspects and effects of tokenisation are unclear and would benefit from global uniformity. Building on its work on digital assets and intermediated securitries, UNIDROIT could consider developing guidance addressing the private-law aspects of tokenised securities. Particular attention could be given to the interface beween direct holding of tokenised securities and existing intermediated holding and settlement systems.

177. As tokenised assets may be spread over different countries and move between them, the applicable national law is particularly uncertain and difficult to determine. Therefore, global uniform rules in this area would be of paramount importance. They could clarify the relationship between tokens and tokenised assets. In particular, they could address the effects of dispositions over tokens on tokenised assets, the possibility of good faith acquisitions of the latter, and priority issues in relation to competing dispositions over tokenised assets in the real world. Such uniform rules would promote garnering the benefits of technological advances for the protection of acquirers and certainty in commerce.

E. Private-law aspects of stablecoins

178. Another worthwhile exercise could be related to stablecoins, specifically the private-law components of rules on asset reserves, their custody and investment, the rights of investors, and redemption obligations and conditions. Currently, the rules on these issues diverge across States, making the cross-border offering and trading of these instruments unnecessarily difficult. Many States still lack any rules on these private-law issues. The FSB has worked on this subject and has

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62 See IMF "Fourth Progress Report On Inclusion Of Enhanced Contractual Provisions In International Sovereign Bond Contracts" 2019.

63 See IMF "A Stocktaking of the Current International Architecture For Resolving Sovereign Debt Involving Private Sector Creditors", Staff Report, October 2025.

produced some high-level guidelines from a regulatory perspective.[64] This guidance might be elaborated in more detail relating to private-law issues to ensure the uniformity of the law.

F. Continued work on insolvency of financial institutions

179. Finally, the Committee recommends that, following the UNIDROIT Legislative Guide on Bank Liquidation and the new project on Insurer Insolvency, UNIDROIT consider extending its work in this area to other types of financial institutions. In particular, the Committee considers that future work on the insolvency of investment firms and central securities depositories would be valuable.

64 FSB, "High-level Recommendations for the Regulation, Supervision and Oversight of Global Stablecoin Arrangements", Final Report, 17 July 2023, available at https://www.fsb.org/uploads/P170723-3.pdf (accessed 1 December 2025).

PART FOUR — SUMMARY OF COMMITTEE FINDINGS

180. This White Paper identifies globalisation, financial crises, technological development, climate change, and geopolitical challenges as key drivers of the evolution of financial markets. These developments present UNIDROIT with both challenges and opportunities in fulfilling its mandate to modernise, harmonise, and coordinate private law in the area of financial markets and technology.

181. Against this background, and on the basis of the analysis of the impact of UNIDROIT's six instruments in this field to date, this White Paper makes the following concrete recommendations for the future:

- **Promotion and awareness**. UNIDROIT should sustain and intensify its efforts to promote and raise awareness of its instruments in the area of Financial Markets and Technology, with a particular focus on stakeholders and jurisdictions that are expected to benefit most from the instruments' implementation and use.
- **Technical assistance**. UNIDROIT should continue its collaboration with international organisations that provide advice and technical assistance on financial law reform.
- **Regulatory collaboration**. UNIDROIT should further strengthen its collaboration with relevant regulatory bodies, in light of the increasing interconnection between private law and regulatory law in financial markets.
- **Intermediated securities**. UNIDROIT should consider developing a concise and coherent set of Principles on Intermediated Securities, building on its two existing instruments in this area, namely the Geneva Securities Convention and the Legislative Guide on Intermediated Securities.
- **Close-out netting**. UNIDROIT should consider developing either (i) an updated version of the Principles on the Operation of Close-Out Netting Provisions, with a view to further emphasising the essential function of close-out netting and clarifying the categories of entities that should be covered; or (ii) a Legislative Guide on Close-Out Netting, which could complement or replace the existing Principles by providing more detailed and practical guidance for legislators and policymakers.
- **Digital assets**. Promotion efforts for the DAPL Principles should target (i) governments in jurisdictions that have introduced, or are in the process of introducing, regulatory frameworks for digital assets; (ii) industry participants and legal practitioners in those jurisdictions; and (iii) jurisdictions in which existing private law does not, or does not sufficiently, address digital assets. It should be clearly communicated that the DAPL Principles are adaptable to different legal cultures, existing legal concepts, and methods of implementation, thereby enabling States to maintain consistency with their domestic legal traditions.
- **Bank liquidation**. Promotion efforts for the Legislative Guide on Bank Liquidation should include active participation in relevant international and regional fora and events, as well as collaboration with partner organisations that offer technical assistance. Consideration could be given to conducting a survey to identify jurisdictions most likely to benefit from the Guide, as well as to establishing a geographically diverse Committee of Experts to support the Secretariat in monitoring relevant developments and promoting the Guide.
- **Verified carbon credits**. Implementation guidance will be essential for States considering legislative adoption. It should be made clear to States considering implementation that the VCC Principles' exclusive focus on private law ensures that States retain full discretion over regulatory design while benefiting from harmonised transaction rules.

- **Insolvency of insurance enterprises**. The project should adopt a broad understanding of "liquidation" and offer a range of tools to address the financial distress of insurers. It should consider the specific features of different types of insurers. Consideration should also be given to insurers offering bank-type products, as well as to insurers that operate within broader financial groups. Guidance on the role of insurance guarantee schemes and cross-border aspects would be particularly valuable.
- **Future initiatives**. New initiatives could usefully focus on (i) liability for misleading information in primary and secondary financial and crypto markets; (ii) the standardisation of custodian terms for securities and digital assets; (iii) contractual arrangements for sovereign debt restructuring; (iv) private-law aspects of tokenisation; (v) private-law aspects of stablecoins; and (vi) continued work on the insolvency of financial institutions.

ANNEXE 1

EXAMPLES OF ENGAGEMENT

This Annexe provides non-exhaustive lists of events and publications in which UNIDROIT instruments in the area of financial markets and technology have been discussed.

1. UNIDROIT instruments on Intermediated Securities

1.1 Events

15 – 17 September 2005: UNIDROIT seminar on Intermediated Securities held in Bern, Switzerland.

31 January – 1 February 2006: UNIDROIT Seminar on Intermediated Securities held in Paris, France.

February 2007: Symposium on the Draft Convention hosted by the Universidad Rey Juan Carlos and the Madrid Stock Exchange in Madrid, Spain.

March 2008: Symposium on Intermediated Securities under Japanese law and the draft Convention hosted by Kyoto University and the Bank of Japan in Tokyo and Kyoto, Japan.

March 2009: Symposium on International Financial Regulation, in which Core Issues under the UNIDROIT (Genevea) Convention and Intermediated Securities, organised by Waseda University in Tokyo, Japan.

20 March 2009: Symposium on Intermediated Securities organised by Oxford University in Oxford, UK.

7 – 8 May 2009: Seminar on the draft Convention on Substantive Rules regarding Intermediated Securities, organised by UNIDROIT in cooperation with the Nigerian Securities & Exchange Commission in Abuja, Nigeria.

7 – 8 June 2010: Annual Conference of the International Insolvency Institute in Rome, Italy.

23 – 24 September 2010: Symposium "The Geneva Securities Convention, the European Securities Law Directive and their Impact on Securities Laws of Selected European Jurisdictions" organised by the University of Geneva and the University of Luxembourg, held in Luxembourg City, Luxembourg.

6 – 7 September 2010: Colloquium on Financial Markets Law "The Law of Securities Trading in Emerging Markets: Lessons Learnt from the Financial Crisis and Long-Term Trends" in Rome, Italy.

30 March 2011: Conference "Intermediated securities risk in Europe and beyond" organised by the UK International Uniform Law in London, UK.

7 – 8 April: International Symposium "Civil Law and Economics 2020: Development and Harmonisation Perspectives of International Economic and Trade Legislation" organised by the University of Costa Rica and the Institute of Private law (Russia) in Costa Rica.

8 – 11 June 2011: Seminar on the Geneva Securities Convention organised by MOFCOM in Beijing, People's Republic of China.

27 – 28 March 2012: Colloquium on Financial Markets Law "Promoting Investor Confidence and Enhancing Legal Certainty for Securities Trading in Emerging Markets" organised by UNIDROIT and the Brazilian Securities Exchange in Rio de Janeiro, Brazil.

11 – 13 November 2013: Colloquium on Financial Markets Law "Enhancing Financial Integrity: The Geneva Convention and the UNIDROIT Principles on Close-Out Netting Under National Law" organised by UNIDROIT and the Capital Markets Board of Türkiye in Istanbul, Türkiye.

21 – 22 October 2013: Teachers of Transnational Commercial Law: Fifth Annual Conference, sponsored by Kyushu University, in Fukuoka, Japan.

24 March 2014: Conference *"Intermediated Securities and Investor Rights"* of the London School of Economics in London, UK.

19 October 2016: First Workshop on the Holding of Securities through an Intermediary, organised by the Commercial Law Centre at Harris Manchester College, University of Oxford in Oxford, UK.

29 – 30 March 2017: Colloquium on Financial Markets Law "Capital Markets and Intermediated Securities: Enhancing and Ensuring Legal Certainty in both Current and Future Holding Systems" organised by UNIDROIT, the China Securities Regulatory Commission, and the China Securities Depository and Clearing Corporation in Beijing, People's Republic of China.

4 May 2017: Second Workshop on the Holding of Securities through an Intermediary, organised by the Commercial Law Centre at Harris Manchester College, University of Oxford in Oxford, UK.

16 June 2017: Third Workshop on the Holding of Securities Through an Intermediary, organised by the Commercial Law Centre at Harris Manchester College, University of Oxford in Oxford, UK.

23 March 2018: Conference "Facilitating Access to Credit and Promoting Economic Development", organised by UNIDROIT and the Secretaría de Hacienda y Crédito Público in Mexico City, Mexico.

13 – 15 April 2018: Conference on "Development Finance in Emerging Markets: Challenges, Innovations and Results" organised by the Queen Mary–UNIDROIT Institute of Transnational Commercial Law in association with the University of Oxford Harris Manchester College Commercial Law Centre, in Oxford, UK.

4 – 7 April 2018: Panel on "The International and Transnational Law of Complex Financial Transactions" at the Annual Meeting of the American Society of International Law in Washington, USA.

22 January 2021: Webinar hosted by the Bank of Italy.

1.2 Publications

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E. Chinese

- 方哲, '浅析《关于中介化证券的实体法公约》对我国证券公司产品与业务创新的影响' (2013) 8 证券法
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2. UNIDROIT Principles on the Operation of Close-Out Netting Provisions

2.1 Events

15 August 2013: Seminar on Derivative Contracts in International Private Law and UNIDROIT Principles on Close-Out Netting organised by Asociación Argentina de Derecho Internacional (AADI) in Buenos Aires, Argentina.

11 – 13 November 2013: Colloquium on Financial Markets Law "Enhancing Financial Integrity: The Geneva Convention and the UNIDROIT Principles on Close-Out Netting Under National Law" organised by UNIDROIT and the Capital Markets Board of Türkiye, held in Istanbul, Türkiye.

16 – 18 December 2013: Colloquium on International Insolvency Law organised by UNCITRAL, held in Vienna, Austria.

7 May 2014: European Post-Trade Conference organised by Association of Financial Markets in Europe (AFME), held in London, UK.

19 – 21 May 2014: 16th Asia-Pacific Central Depository Group (ACG) Coss Training Seminar hosted by the Central Securities Depository of Iran (CSDI), held in Tehran, Iran.

22 January 2021: Webinar hosted by the Bank of Italy.

2.2 Publications

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- See https://www.unidroit.org/instruments/capital-markets/netting/select-bibliography/.

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- Wittmann J, 'Financial Market Regulation and Private Law: A New Frontier of Transnational Commercial Law' (2024) 28 Uniform Law Review 349
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B. French

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3. UNIDROIT Principles on Digital Assets and Private Law

3.1 Events

4 October 2023: Launch of the Digital Assets and Private Law Principles at the seat of UNIDROIT in Rome, Italy.

7 – 8 November 2023: Fifth Shanghai International Arbitration Forum "New Technologies, New Tracks and New Momentum, New Advantages" as part of the 2023 Shanghai Arbitration Week in Shanghai, People's Republic of China.

22 – 23 January 2024: Lecture for students of the Master in International Economic Law at the Université Capitole Toulouse, France.

8 February 2024: Roundtable on "The UNIDROIT Principles on Digital Assets and Private Law" organised by the QMUL-UNIDROIT Institute of Transnational Commercial Law.

25 March 2024: Workshop on the "Tokenization of Physical Assets," organised by the University of Turin, University of Milano-Bicocca, and the University of Florence, and funded by the Italian Ministry of Research.

27 March 2024: Lecture for students from the Loyola University Chicago School of Law held at UNIDROIT, Rome.

11 – 12 April 2024: Conference on "Digital Assets and Private International Law" hosted by the European Banking Institute, the University of Vienna, and the Interdisciplinary Association of Comparative and Private International Law in Vienna, Austria.

5 July 2024: Summer School on Law and Technology co-organised by the University of Lausanne (UNIL) and the British Institute of International and Comparative Law (BIICL) in London, UK.

3 September 2024: Webinar on "Digital Asset Dynamics and Case Studies: Insights from China, Singapore and International Initiatives" hosted by the Asian Business Law Institute (ABLI), in cooperation with UNIDROIT.

11 September 2024: 7th Annual SOLAIR Conference organised by the Institute of State and Law of the Czech Academy of Sciences, in cooperation with the Ministry of Industry and Trade of the Czech Republic, with UNIDROIT as one of the supporting partners in Prague, Czech Republic.

25 September 2024: 17th Edition of the "Jornadas de la Asociación Americana de Derecho Internacional Privado (ASADIP) with the theme of *"A more intelligent and less artificial international private law"*, held at Austral University in Buenos Aires, Argentina.

26 – 27 September 2024: Third Forum on Rule of Law in Global Digital Trade, co-organised by the Wuhan University Academy of International Law and Global Governance, the China Society of Private International Law and local authorities, held in Hangzhou, People's Republic of China.

27 September 2024: Symposium "Persons and Things in the Digitalised World: The Private Law of Cybernetic Avatars in 2050", hosted by Chuo University in Japan.

26 October 2024: Panel on "Legal Regulation of Scientific and Technological Innovation" as part of the 2024 Tsinghua World Forum on the Rule of Law in Beijing, People's Republic of China.

13 – 15 November 2024: Fourth "International Congress on the UNIDROIT Principles of Private Law and Digital Assets", organised by the LegalCripto research group (BAES) and the Chair in Financial Markets Law of the CEU University of San Pablo (Cátedra de Derecho de los Mercados Financieros), held at the University of Alicante and the University of Madrid, Spain.

29 November 2024: Panel on "Global Perspectives in Computational Law" at the 7th International Forum "Computational Law: Data Governance and Artificial Intelligence Legislation", organised by Tsinghua University in Beijing, People's Republic of China.

10 December 2024: DigiArt conference on NFTs, organised by the Association Du Droit à l'Art and Association de droit du climat er de l'innovation (ADCI), at the University of Lausanne, Switzerland.

28 January 2025: Inaugural session of the Seminar Series of the UNIDROIT Asian Transnational Law Centre, hosted by UNIDROIT in Rome, Italy.

30 January 2025: Presentation of DAPL Principles with representatives from Serbia's Central Bank.

30 January 2025: Seminar organised by the Legal & Treaties Division of the Indian Ministry of External Affairs.

6 February 2025: 7th Conference Rencontre entre la Science et le Droit dans la Numérique on "Digital Assets, Digital Inheritance and Digital Afterlife", organised as part of the Digitalisation Week by the University of Lausanne, Switzerland.

21 March 2025: Presentation to a group of international post-graduate students as part of a course on "Fintech and digital money" taught by representatives of the Italian Ministry of Finance at Roma Tre University.

8 April 2025: International Conference on "Global Challenges in the Digital Era: Digital Asset Transactions and Legal Protection" jointly organised by UNIDROIT, the Beijing International Dispute Resolution Development Centre, and the Beijing Arbitration Commission/Beijing International Arbitration Court in Beijing, People's Republic of China.

25 June 2025: UNIDROIT International Programme for Law and Development "Africa Plus".

17 September 2025: UNIDROIT International Programme for Law and Development focused on the "Balkans–Eastern Partnership–Central Asia–Caucasus" (BEPCAC).

25 September 2025: Conference hosted by the Shanghai International Arbitration Centre (SHIAC) and co-organised by UNCITRAL and Shanghai Maritime University in Shanghai, People's Republic of China.

26 September 2025: Fourth Forum on Rule of Law in Digital Trade in Hangzhou, People's Republic of China.

3 – 4 October 2025: International Conference "4th International Forum of Law School Deans and Jurists Communication and Cooperation among Global Legal Professionals in the Age of AI conference", hosted by Renmin University of China, People's Republic of China.

5 December 2025 and 26 January 2026: Digital Assets Round Table Expert Series (DARTE), focusing on civil and common law jurisdictions and examining challenges in applying private law to digital assets, hosted by UNIDROIT in Rome, Italy.

3 - 4 February 2026: UNIDROIT Middle East and North Africa Transnational Law Academic Symposium on "Transnational Commercial and Investment Law and Middle East Regional Developments", hosted by UNIDROIT in Rome, Italy.

6 February 2026: Conference "Digital Trade Law: Problemi e Prospettive", held at La Sapienza Università di Roma.

10 – 13 February 2026: UNCITRAL Colloquium on "Harmonizing law in the age of digital trade and finance – digital assets and platforms", New York, USA.

5 March 2026: Conference jointly organised by UNIDROIT and the Royal University of Law and Economics (RULE) of Cambodia on "Modernising Private Law for the Digital Economy: East Asia–Europe Comparative Perspectives and Cambodian Practice" in Phnom Penh, Cambodia.

3.2 Publications

A. English

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- Dilek D, Omlor S and Skauradszun D, 'A New Private International Law for Digital Assets' (2025) 4 The Rabel Journal of Comparative and International Law 714
- Gullifer L and Tirado I, 'Proprietary Rights and Digital Assets: A "Modest Proposal" From a Transnational Law Perspective' (2025) 87 Law and Contemporary Problems 211
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- Kostoula T, 'Security rights in crypto-assets: an opportunity for uniform law?' (2024) 28 Uniform Law Review 434
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- Ripley BY and others, 'Response to UNIDROIT Digital Assets and Private Law Consultation' (University of Aberdeen : School of Law 2023) <https://www.abdn.ac.uk/media/site/law/documents/CCL_response_to_the_UNIDROIT_Consultation_on_Digital_Assets_and_Private_Law_final_20.2.23.pdf>
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- Woxholth J, 'Competing claims to crypto-assets' (2023) 28 Uniform Law Review
- Yamadera S, Inukai S and Schmidt M, 'CSIF Brief No. 3: An Introduction to Digital Assets' (Asian Development Bank 2024)

- Yamadera S, Inukai S and Schmidt M, 'CSIF Brief No. 4: Key Aspects of UNIDROIT Principles on Digital Assets and Private Law' (Asian Development Bank 2024)
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- Boutron-Collinot M and Riano-Saad A, 'Le paiement, angle mort du développement des crypto-monnaies ? Une étude du pouvoir libératoire des crypto-monnaies à partir des droits français et colombien' [2023] French Journal of Legal Policy 83
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- De Vauplane H and Bonneau T, 'Principes d'UNIDROIT sur les actifs numériques' [2023] Revue de droit bancaire et financier 18
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C. Spanish

- Castillo Iborra F, 'Principios UNIDROIT sobre activos digitales y derecho privado' (2023) 6 Revista de Derecho del Sistema Financiero 365
- Cavaller Vergés M, 'En busca de un marco legal para los activos digitales: los principios UNIDROIT sobre activos digitales y derecho privado' (2024) 16 Cuadernos de Derecho Transnacional 113
- Jiménez-Gómez BS, 'Los principios de UNIDROIT sobre activos digitales: entre el Derecho mercantil y el Derecho internacional privado' (2023) 23 Anuario Español de Derecho Internacional Privado 283
- Ríos Rabi IA, 'Activos digitales en el derecho privado chileno' (Memoria de Prueba, Universidad de Chile 2024)

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- Omlor S, 'Rechtspolitik der Blockchain: Allgemeines Privatrecht der Kryptowerte im BGB – Bestandsaufnahme und Gesetzesvorschlag' in Omlor S and Möslein F (eds), *Blockchain und Recht* (Mohr Siebeck 2024)

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- 北京市司法局，'北京市司法局关于《中华人民共和国电子商务法》的通知' <https://sfj.beijing.gov.cn/sfj/sfdt/sfxzyw59/743586548/index.html>
- 申卫星，'数据产权：从两权分离到三权分置' (2023) 6 中国法律评论
- 金诚同达，'中国加密货币法律框架解析' <https://www.jtn.com/CN/booksdetail.aspx?type=06001&keyid=00000000000000008587&PageUrl=majorbook&Lan=CN>

4. UNIDROIT Legislative Guide on Bank Liquidation

4.1 Events

21 October 2022: Bank of Italy conference "Banking crises: resolution, liquidation and prospects for reform in light of the Spanish and Italian experience".

25 October 2022: XXI IACL General Congress on "Financial Systems" in Paraguay.

7 November 2022: Inaugural Asia-Pacific Private International Law Summit, jointly organised by UNIDROIT and the Department of Justice (DoJ) of the Hong Kong Special Administrative Region of China (HKSAR), held in the HKSAR.

23 – 25 May 2023: Regional Conference on "Challenges of the Modern Insolvency Law", sponsored by the United States Agency for International Development (USAID), the Commercial Law Development Program (CLDP) and the Business Rehabilitation and Insolvency Practitioners Association (BRIPA), in Tbilisi, Georgia.

29 May – 1 June 2023: 21st IADI Asia-Pacific Regional Committee (APRC) Annual Meeting and International Conference, hosted by the Deposit Insurance Corporation of Japan in Fukuoka, Japan.

2 June 2023: Presentation of the bank insolvency project to the staff and invited experts of the Bank of Japan's Institute for Monetary and Economic Studies (IMES).

2 July 2023: Roundtable discussion with insolvency experts in India, organised by the Insolvency Law Academy.

3 – 4 July 2023: Seminar dedicated to the work of UNIDROIT, organised by the Indian Ministry of External Affairs and roundtable discussion with senior public sector officials in India, organised by India's Ministry of External Affairs in the context of India's Presidency of the UNIDROIT General Assembly in New Delhi, India.

5 – 7 July 2023: UNIDROIT International Programme for Law and Development (IPLD), focused on African jurists, and held in Rome, Italy.

21 July 2023: Lecture to students as part of their master's studies in international business law at the Sapienza University in Rome.

5 September 2023: Online discussion as part of Jindal Global Law School's (India) second edition of the Insolvency Law Working Paper Series, organised in collaboration with the Insolvency Law Academy and INSOL India.

25 September 2023: Joint UNIDROIT -EBRD workshop in London.

9 – 11 February 2024: 2nd Annual Conference of the Insolvency Law Academy in Goa, India.

19 March 2024: "Brown Bag Lunch on Bank Insolvency" of the European Bank for Reconstruction and Development (EBRD) in London, United Kingdom, and meeting with representatives from the EBRD's Office of General Counsel and Capital and Financial Markets Development team.

6 June 2024: Annual Legal Conference of the Single Resolution Board (SRB) in Brussels.

11 June 2024: International Insolvency Institute's 24th Annual Conference in Singapore.

4 July 2024: UNIDROIT International Programme for Law and Development, focused on African jurists, and held in Rome, Italy.

19 July 2024: Lecture to students as part of their master's studies in international business law at Sapienza University in Rome, Italy.

19 September 2024: Joint UNIDROIT -European Banking Institute conference on the draft Legislative Guide, hosted by the Université Paris-Panthéon-Assas in Paris, France.

4 October 2024: INSOL Europe's Annual Congress in Sorrento, Italy.

11 October 2024: Roundtable for the 10th Anniversary Series of the Centre for Banking and Finance Law of the Faculty of Law, National University of Singapore (NUS).

17 October 2024: International Workshop "Proportionality in Bank Crises: the Case of Retail Banks", hosted by the University of Siena and co-sponsored by the Next Generation EU fund, the Italian Ministry for Education and Research, and the Italy's National Resilience and Recovery Plan.

7 November 2024: Meeting of the European Forum of Deposit Insurers.

18 – 19 December 2024: 9th "High-level meeting on financial stability and regulatory and supervisory priorities" in Abu Dhabi, jointly organised by the Arab Monetary Fund, the BCBS and the FSI.

16 – 17 January 2025: "High-level meeting for Africa" in Cape Town, organised by the BCBS and the FSI in coordination with the South African Reserve Bank.

27 January 2025: Webinar for experts from European Parliament staff, focusing on how the Legislative Guide can complement the review of the European Crisis Management and Deposit Insurance framework (CMDI review).

14 February 2025: International Colloquium in Memoriam of Luís Silva Morais on "Capital Markets and Banking Unions, Law and the Courts: Challenges and Perspectives" in Bologna.

5 – 6 June 2025: Conference on the liquidation of banks at the Banco de España in Madrid, Spain.

30 June 2025: UNIDROIT International Programme for Law and Development "Africa Plus".

9 July 2025: UNIDROIT-FSI jointly "Policy Implementation Meeting on Bank Liquidation", hosted at the BIS headquarters in Basel, Switzerland.

18 July 2025: Lecture to students as part of their master's studies in international business law at Sapienza University in Rome, Italy.

11 September 2025: Virtual guest lecture for students at Makerere University in Uganda.

22 September 2025: UNIDROIT International Programme for Law and Development focused on the "Balkans–Eastern Partnership–Central Asia–Caucasus" (BEPCAC).

17 October 2025: EU Committee meeting of the European Forum of Deposit Insurers, with focus was on the role of deposit insurers in bank liquidation proceedings online and in Budapest, Hungary.

16 – 17 October 2025: 15th International Congress on Insolvency and Restructuring in Madrid, Spain.

22 October 2025: Fourth Italian-Norwegian Conference, organised by the Italian Norwegian Research Institute for Law and Economics (INRILE) at Luiss Guido Carli University in Rome, Italy.

22 October 2025: "High-level meeting on Banking Supervision", jointly organised by the Association of Supervisors of Banks of the Americas (ASBA), the BCBS, and the FSI in Port of Spain, Trinidad and Tobago.

5 November 2025: Panel on "The liquidation of banks and the birth of a new international standard" as part of the Queen Mary-UNIDROIT Institute of Transnational Commercial Law Advisory Board Lecture Series 2025-2026.

12 December 2025: Conference organised by the Bank of Italy on "The Single Resolution Mechanism, ten years since" in Rome, Italy.

20 January 2026: Seminar at the European University Institute, organised by the Florence School of Banking and Finance. During their visit, the UNIDROIT Secretary-General and Senior Legal Officer Ms Myrte Thijssen also took part in an interview discussing key features of the Legislative Guide, a recording of which will be made available to staff of the EU's Single Supervisory Mechanism (SSM).

15 April 2026: Online seminar on "Comparative Approaches to Bank Liquidation: A Discussion of the UNIDROIT Legislative Guide" organised by University of Leeds School of Law.

29 June 2026: UNIDROIT International Programme for Law and Development "Africa Plus" – lecture by Prof Winifred Tarinyeba (Makerere University, Uganda).

30 June 2026: UNIDROIT Asian Transnational Law Centre Summer School 2026 in Shanghai, China.

2 July 2026: Lecture to students as part of their master's studies in international business law at Sapienza University in Rome, Italy.

4.2 Publications/other

A. English

- Guo S, 'Resolution or Liquidation for Banks? A Tool-Based Proposal for Single and Double-Track Regimes' [2024] Journal of Business Law 620
- Ramos-Muñoz D, '"Twilight Troubles". Early Intervention, Resolutionn Preparation and Triggers, and the Urgent Need to Reform Them' (2025) 26 European Business Organisation Law Review 133
- Thijssen M, 'Handling Non-Systemic Bank Failures: The UNIDROIT Legislative Guide on Bank Liquidation' [2025] Revista General de Insolvencias & Reestructuraciones / Journal of Insolvency and Restructuring 313
- Tirado I and Thijssen M, 'An Introduction to the UNIDROIT Legislative Guide on Bank Liquidation' (*INSOL I-READ*, June 2025) <https://email.insol.org/cr/AQj--A0Qj5xsGKn1q35XrkitEDHJqrJnYQd5YgkSRSJbOD6fAOJq7srJNwO_ug>

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B. French

- Gossé J-B and others, 'Accélérer le processus d'harmonisation européenne du droit de l'insolvabilité pour renforcer l'intégration financière' *(*Bulletin de la Banque de France 2023) <https://www.banque-france.fr/system/files/2023-11/BDF249-3_Harmonisation-droit-insolvabilite.pdf>

C. Spanish

- Colino Mediavilla JL, Freire Costas RM, González Vázquez JC and Juez Hervás LF (eds*), La liquidación de entidades de crédito en un procedimiento de insolvencia* (Servicio de Publicaciones de la Facultad de Derecho. Universidad Complutense de Madrid 2025) <https://docta.ucm.es/entities/publication/2100e294-f9cd-40a1-a33c-99cb82fa1a0e>
- Lastra RM, 'Armonización internacional de la liquidación bancaria: el proyecto UNIDROIT [2023] Revista de derecho bancario y bursátil 439
- Tapia Hermida A, 'La liquidación forzosa de entidades de crédito. Congreso internacional celebrado en el Banco de España los días 5 y 6 de junio de 2025 (2): Tres principios básicos de la regulación de las crisis bancarias' (*El Blog de Alberto J. Tapia Hermida*, 10 June 2025) <https://ajtapia.com/2025/06/la-liquidacion-forzosa-de-entidades-de-credito-congreso-internacional-celebrado-en-el-banco-de-espana-los-dias-5-y-6-de-junio-de-2025-2-tres-principios-basicos-de-la-regulacion-de-las-crisis-banca/>

D. German

N/A

E. Chinese

N/A

5. UNIDROIT Draft Principles on Verified Carbon Credits

5.1 Events

24 February 2025: Conference on the tokenisation of carbon credits organised by the Centre for Responsible Digitality.

21 March 2025: Lecture delivered to Roma Tre University students as part of a course on fintech and digital money.

19 – 20 May 2025: Hallsworth Conference "Digital and Sustainable Futures: What role for Digital Assets and Private Law?" held at the University of Manchester in Manchester, UK.

26 June 2025: Seminar during the UNIDROIT International Programme on Law and Development (IPLD) Africa Plus edition.

5 August 2025: Event for representatives of the government of Panama.

17 September 2025: Seminar during the IPLD Balkans, Eastern Partnership countries, Central Asia, and the Caucasus (BEPCAC) edition.

5.2 Publications

A. English

- Franzina P, 'Hague Conference to Discuss Private International Law Aspects of Voluntary Carbon Markets' (*EAPIL Blog*, 30 January 2025) <https://eapil.org/2025/01/30/hague-conference-to-discuss-private-international-law-aspects-of-voluntary-carbon-markets/>
- Legal High Committee for Financial markets of Paris, 'Report on the Legal and Regulatory Aspects of Voluntary Carbon Credits' (Banque de France 2024)
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B. French

- Commission des Nations Unies pour le droit commercial international, 'Compilation des commentaires reçus sur l'étude CNUDCI/UNIDROIT sur la nature juridique des crédits d'émission de carbone vérifiés émis par des organismes indépendants de normalisation du carbone : cinquante-huitième session' (7-25 July 2025) UN Doc A/CN.9/1216
- Haut Comité Juridique de la Place Financière de Paris, 'Rapport sur les aspects juridiques et réglementaires des crédits carbone volontaires' (Banque de France 2024)

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- Tuculet MV, 'Una oportunidad para los mercados de carbono en Argentina' (*Infobae América*, 24 April 2024) <https://www.infobae.com/opinion/2024/04/24/una-oportunidad-para-los-mercados-de-carbono-en-argentina/>

D. German

N/A

E. Chinese

- 国家发展改革委员会，'国家发展改革委办公厅关于组织开展碳排放权交易试点工作的通知' <https://www.ndrc.gov.cn/xxgk/zcfb/tz/201201/t20120113_964370.html>

ANNEXE 2

REGULATION AND LAW ON VIRTUAL DIGITAL ASSETS IN INDIA AND THE UNIDROIT DAPL PRINCIPLES

Professor Dr. Risham Garg

1. Executive Summary

India's present treatment of virtual digital assets, or VDAs, is meaningful but incomplete. Indian law recognises VDAs most directly through fiscal legislation, subjects virtual asset service providers to anti-money laundering and financial intelligence reporting obligations, and leaves many private-law consequences to ordinary principles of property, contract, trust, arbitration, insolvency and criminal law. The proposed Securities Markets Code 2026 moves the securities-law perimeter forward by adopting a technology-neutral approach to tokenised securities, but it does not itself create a comprehensive regime for all cryptocurrencies or VDAs.

The UNIDROIT Principles on Digital Assets and Private Law, or DAPL, address a different and complementary layer. DAPL is not a licensing code, tax law, securities code, or anti-money laundering statute. It is a private-law instrument that supplies concepts and rules for proprietary rights, control, transfer, innocent acquisition, custody, insolvency, secured transactions and private international law in relation to digital assets capable of control.

The most important finding of this report is that India's public-law framework and the Securities Markets Code should be supplemented by a private-law framework. The proposed Code can determine when a token is a security, derivative, investment scheme or pooled investment vehicle. DAPL can help determine who has proprietary rights in a digital asset, who has control, whether a custodian holds client assets outside its own insolvency estate, whether an innocent acquirer takes free of prior proprietary claims, and how digital assets may serve as collateral.

India is already moving toward a DAPL-compatible position in judicial reasoning. The Madras High Court's analysis in Rhutikumari v Zanmai Labs Pvt. Ltd. treats cryptocurrency as intangible property and recognises trust or fiduciary protection in a custodial platform context. That reasoning aligns with DAPL Principle 3, which provides that digital assets can be the subject of proprietary rights. However, India has not yet codified the broader architecture necessary to deal consistently with custody, collateral, shortfalls, priority conflicts, insolvency, cross-border transfers and tokenised linked assets.

The recommended policy approach is a dual-track model: retain a technology-neutral securities framework for security-like digital assets and tokenised capital-market instruments, while enacting a UNIDROIT-aligned private-law framework for controllable VDAs more broadly. This would improve legal certainty, strengthen user protection, reduce litigation uncertainty, support responsible innovation, and provide courts and market participants with predictable rules for VDA custody, transfer and enforcement.

Key Points at a Glance

Theme	Key point	Policy implication
Regulatory architecture	India currently relies on tax, FIU/PMLA and partial securities-law treatment.	A private-law layer is needed.
Technology neutrality	The Securities Markets Code and DAPL both avoid treating digital form as decisive.	Tokenised securities remain securities; pure cryptocurrencies require separate treatment.
Property status	India case law is moving toward proprietary recognition.	Codification would reduce uncertainty.
Control	DAPL makes control the central factual concept.	India should define control for transfer, custody, collateral and enforcement.
Custody and insolvency	DAPL provides client-asset and shortfall rules.	India needs statutory rules for exchange failures and hacks.
Cross-border disputes	DAPL offers an applicable-law waterfall.	India should adopt conflict rules for borderless digital assets.

2. Research Methodology and Scope

The comparison proceeds in three layers. First, it identifies India's current public-law framework: taxation, FIU/PMLA reporting, and sectoral regulatory statements. Secondly, it analyses the proposed Securities Markets Code approach to tokenised securities, investment schemes and VDAs. Thirdly, it compares those positions with DAPL's private-law architecture.

The principal research question is not whether India should copy UNIDROIT in full. The more precise question is which DAPL principles could usefully supplement India's existing and proposed framework, and how those principles map onto Indian disputes already visible in litigation involving crypto platforms, user accounts, frozen assets and exchange restructuring.

3. Conceptual Framework: Public Regulation and Private Law

3.1 India's framework is presently regulatory, fiscal and remedial

India has not enacted a comprehensive crypto statute. Instead, VDAs are addressed through tax law, the anti-money laundering framework, reporting obligations and ordinary civil or criminal remedies. This structure produces partial visibility for the State, especially through taxation and FIU reporting, but it does not itself solve private-law questions of entitlement, transfer, custody, pledge, insolvency or priority.

The proposed Securities Markets Code also does not attempt to be a complete VDA statute. It is principally a consolidation and modernisation of securities-market law. Its key contribution is to prevent regulatory arbitrage where a security is represented in tokenised or distributed-ledger form. It does not automatically convert every cryptocurrency into a security.

3.2 UNIDROIT DAPL is a private-law instrument

DAPL begins from a different premise. It is concerned with proprietary rights and transactional certainty. It does not prescribe whether an exchange must be licensed, whether a token offering must be approved, or whether a tax must be deducted. It provides guidance on how legal systems should recognise and protect rights in digital assets once transactions occur.

This distinction is central. India's VDA regime currently answers 'what must be reported and taxed?' and 'when is a token a security?' DAPL answers, 'who has control?', 'what happens if a custodian fails?', 'can a secured creditor obtain priority by control?', and 'which law governs proprietary issues in a borderless asset?' The two frameworks therefore should be seen as complementary.

4. Definitions: Indian VDA and UNIDROIT Digital Asset

4.1 Indian definition and its limits

The definition of VDA in India is most directly connected to taxation. Section 2(47A) of the Income-tax Act provides the statutory recognition that Indian cases and commentary use to describe cryptocurrencies as VDAs. This recognition is important, but fiscal recognition does not automatically determine property status, custody consequences, securities classification, insolvency treatment or private-law transfer rules.

The proposed Securities Markets Code, 2026 does not replace the tax definition with a unified private-law definition. Instead, it asks whether a digital or tokenised arrangement falls within pre-existing securities-law categories. A tokenised bond, tokenised unit or tokenised share remains a security because of its legal nature. A bitcoin-like asset does not become a security merely because it may be traded or held for investment.

4.2 UNIDROIT definition

DAPL defines a digital asset as an electronic record capable of being subject to control. This definition is deliberately functional. It does not depend on labels such as cryptocurrency, token, NFT, utility token or stablecoin. The threshold question is whether the electronic record is capable of the factual abilities that DAPL calls control.

This makes DAPL potentially broader for private-law purposes than India's securities framework. A pure cryptocurrency may be outside the Securities Markets Code but still be a DAPL digital asset because it can be controlled through cryptographic keys and transferred on a system.

Comparison point	India	UNIDROIT DAPL	Evaluation
Primary label	Virtual Digital Asset under tax law	Digital asset as controllable electronic record	India's definition is fiscal; DAPL is private-law functional.
Trigger for treatment	Tax transfer, AML reporting, securities-like features	Capability of control	DAPL better supports proprietary analysis.
Treatment of tokenised securities	Regulated if legally a security	Linked asset effects depend on other law	Strong conceptual alignment.
Pure cryptocurrency	Generally outside SMC unless security-like	Within DAPL if controllable	India needs private-law rules beyond SMC.

5. India's Existing VDA Regime

5.1 Taxation

India's tax framework gives the most explicit statutory recognition to VDAs. Income from transfer of VDAs is subject to a special tax regime, and transfers may attract tax deduction at source. The key point for this report is that taxability does not resolve private-law status. A taxable VDA may still raise separate questions about ownership, beneficial entitlement, custody, security, tracing, trust and insolvency.

5.2 FIU/PMLA and reporting

VDA service providers operating in India are subject to financial intelligence and anti-money laundering obligations. FIU reporting, KYC, due diligence and suspicious transaction reporting improve public-law oversight of platforms and users. However, AML registration does not itself answer whether customer assets are trust property, whether pooled assets are segregated, or how shortfalls are allocated in a custodian's insolvency.

The 2026 crypto-asset reporting materials further show that India is moving toward tax-transparency reporting aligned with international crypto-asset reporting frameworks. Reporting Crypto-Asset Service Providers must identify reportable users, conduct due diligence, report transactions and retain records. This is an important compliance layer, but it remains distinct from DAPL's private-law layer.

5.3 Existing private-law reliance

In the absence of a comprehensive statute, Indian disputes have been channelled through contract law, trust principles, arbitration, criminal remedies, constitutional property concepts and interim relief. This is visible in the case materials, especially the contrast between the Delhi High Court's refusal to create crypto regulation by mandamus and the Madras High Court's willingness to protect identified crypto holdings through interim private-law remedies.

6. Proposed Securities Markets Code 2026

6.1 Technology-neutral securities treatment

The proposed Securities Markets Code is important because it adopts a technology-neutral approach. A security does not cease to be a security because its record is maintained by distributed ledger technology, tokenisation or another digital system. Tokenised shares, bonds and units of regulated investment schemes therefore remain within the securities-law perimeter.

6.2 VDAs outside the securities perimeter

The Code does not, however, regulate every VDA. Cryptocurrencies and other VDAs that do not satisfy the statutory characteristics of securities or derivatives may remain outside the Securities Markets Code. This creates a gap from an investor-protection perspective, particularly where assets are traded on organised platforms, used for speculation, or promoted to retail users.

6.3 Investment schemes and pooled vehicles

Clause 32 operates as an important anti-arbitrage provision. It captures arrangements involving pooling, profit participation, management by another person and lack of day-to-day control by

participants. A crypto-based investment arrangement should not avoid investment-scheme treatment merely because it is implemented through tokens or distributed ledgers. This is close to DAPL's linked-asset logic: digitisation does not by itself determine legal effect.

7. UNIDROIT DAPL: Structure and Core Principles

DAPL is organised around seven core areas: scope and definitions; private international law; control and transfer; custody; secured transactions; procedural law; and insolvency. The principles are technology-neutral, jurisdiction-neutral and organisationally neutral. They are intended to be capable of implementation in common-law, civil-law and mixed legal systems.

DAPL section	Core principle	Relevance for India
Scope and definitions	Digital asset equals controllable electronic record	Could supplement the VDA tax definition with a private-law definition.
General principles	Digital assets can be subject to proprietary rights	Would codify the direction of Indian case law.
Applicable law	Waterfall based on asset, system, issuer and forum rules	Useful for offshore exchanges and foreign-seated arbitration.
Control and transfer	Control as functional equivalent of possession	Needed for transfer, custody, secured credit and enforcement.
Custody	Custodian duties, client asset segregation and insolvency protection	Directly relevant to exchange/platform failures.
Secured transactions	Digital assets can be collateral; control perfects priority	Important for crypto lending and secured finance.
Procedural and insolvency	Other law applies but should adapt to digital asset features	Supports freezing orders, key disclosure and custodial recovery.

8. Comparative Analysis by Legal Theme

8.1 Proprietary rights

UNIDROIT Principle 3 provides that digital assets can be the subject of proprietary rights. India has not enacted an equivalent general provision, but the reasoning in Rhutikumari is directionally consistent. The strongest reform would be an Indian statutory declaration that controllable VDAs can be the subject of proprietary rights, without necessarily classifying every VDA as a security or legal tender.

8.2 Control

Control is the central missing building block in Indian law. DAPL uses control as a factual concept similar to possession. It is independent of ownership but produces legal consequences in transfer, innocent acquisition, custody and secured transactions. Indian courts have discussed custody, freezing, platform control and wallets, but the provided Indian materials do not identify a statutory definition of control. A DAPL-inspired definition could greatly reduce uncertainty.

8.3 Transfer and innocent acquisition

DAPL preserves the nemo dat principle but creates an innocent-acquisition exception for transferees who obtain control and satisfy good-faith requirements. India has no equivalent general rule identified in the materials. This matters in hacked-token, stolen-private-key and downstream-purchaser cases. Without a take-free rule, every downstream transfer may carry litigation risk, reducing liquidity and increasing transaction friction.

8.4 Linked assets and tokenisation

DAPL Principle 4 states that a digital asset may be linked to another asset, but the legal effect of that link depends on other law. This closely matches the Securities Markets Code approach. A tokenised share remains a share because securities law gives effect to that relationship. A token purporting to represent gold, real estate or copyright does not automatically transfer the linked asset unless the relevant property, company, securities, trust or intellectual property law recognises that effect.

8.5 Custody and exchange liability

DAPL provides the most useful model for Indian exchange regulation from a private-law perspective. It distinguishes custody from mere contractual delivery obligations, imposes duties to safeguard and record client assets, permits pooled custody subject to rules, and protects client assets from custodian creditors on insolvency. Indian law presently reaches platforms through FIU/PMLA and contractual or fiduciary litigation, but a comprehensive custody statute is absent in the materials.

8.6 Insolvency and shortfalls

DAPL Principle 13 provides a roadmap for exchange failure. If a custodian maintains assets for clients, those assets are not available to the custodian's creditors. If there is a shortfall in an undivided pool, the shortfall is shared proportionately among the clients of that pool, subject to any optional rule making the custodian's own assets of the same description bear loss first. India's WazirX/Zanmai issues show why such rules are urgent.

8.7 Secured transactions

DAPL Principles 14 to 17 allow digital assets to be used as collateral and allow control to make a security right effective against third parties. India's materials do not identify an equivalent VDA collateral regime. As VDA markets mature, collateral rules will be necessary for lending, margin finance, institutional custody, derivatives and insolvency.

8.8 Private international law

Digital assets strain ordinary conflict-of-laws rules because they lack physical situs. DAPL Principle 5 creates a waterfall: law specified in the digital asset, law specified in the system, issuer seat, and forum-selected rules. Indian cases already show cross-border complications involving Singapore arbitration and restructuring. India would benefit from a statutory conflicts rule for proprietary VDA issues.

9. Detailed Case Analysis through a DAPL Lens

9.1 Internet and Mobile Association of India v RBI

The Supreme Court's decision in Internet and Mobile Association of India v RBI is best understood as a public-law and regulatory proportionality case. It recognises the central bank's legitimate role in financial stability, but it does not supply private-law rules for digital asset ownership, transfer or custody. DAPL would not displace such regulatory powers; it would instead operate beneath them by clarifying proprietary consequences once digital asset transactions occur.

9.2 Rhutikumari v Zanmai Labs Pvt. Ltd.

Rhutikumari is the key case from India that most closely resembles a DAPL problem. The user asserted rights in identifiable XRP holdings following platform freeze and restructuring events. The Madras High Court recognised cryptocurrency as property, treated it as a VDA under tax law, and accepted the possibility of trust or fiduciary treatment for electronically held assets. DAPL would analyse the same fact pattern through proprietary rights, custody agreement, control, segregation, client entitlement, shortfall and insolvency principles.

The practical significance is substantial. If the platform was a DAPL-style custodian, client assets would not form part of the platform's assets available to creditors. The platform would owe duties to safeguard, maintain records and separate client assets. If assets were held in an undivided pool and a shortfall existed, DAPL would allocate losses by pool rather than allowing ad hoc socialisation across unrelated assets without legal basis.

9.3 Aditya Malhotra v Union of India

Aditya Malhotra demonstrates judicial restraint. The Delhi High Court refused to compel the creation of a crypto regulatory framework through writ jurisdiction and indicated that private exchange-user disputes requiring evidence should be pursued in appropriate forums. DAPL reinforces the need for legislation: courts may provide relief case by case, but systematic private-law certainty requires statutory architecture.

9.4 Shailesh Babulal Bhatt v State of Gujarat

The supplied Supreme Court order in Shailesh Babulal Bhatt is procedural and does not decide the classification of cryptocurrency. The case nevertheless illustrates the involvement of enforcement agencies and the likelihood that VDA disputes will often involve overlaps between criminal

investigation, money laundering concerns, asset tracing and private proprietary claims. DAPL's procedural principles would not govern criminal investigation, but they would help courts understand control, proprietary rights and enforcement against digital assets.

10. Gap Matrix and Risk Assessment

Legal issue	India's position	DAPL position	Risk if unaddressed
Proprietary status	Emerging case-law recognition; no general statute identified	Digital assets can be subject to proprietary rights	Uncertain remedies and inconsistent outcomes
Control	No statutory control definition identified	Control is a factual concept which gives rise to legal consequences	Difficulty proving entitlement and enforcing rights
Innocent acquisition	No general VDA take-free rule identified	Good-faith acquirer with control takes free of claims	Market illiquidity and downstream litigation risk
Custody	AML registration and case-law fiduciary analysis	Detailed custody agreement, duties and segregation rules	Exchange failures create user-loss uncertainty
Insolvency	Open questions in cases	Client assets excluded; shortfalls allocated	Users may be treated as unsecured creditors
Collateral	No VDA secured-transactions regime identified	Security rights possible; control gives third-party effectiveness and priority	Uncertain secured lending and priority disputes
Conflict of laws	Cross-border cases noted	Applicable-law waterfall	Foreign platforms and restructuring create uncertainty
Linked assets	SMC covers tokenised securities if security-like	Other law determines legal effect of link	Tokenised asset transfers may be legally ineffective

11. Reform Recommendations for India

Adopt a private-law VDA statute or chapter

India should enact a private-law framework for controllable VDAs. This could sit alongside tax, FIU/PMLA, securities and consumer-protection rules. It should not attempt to classify every VDA as a security.

Codify proprietary rights in controllable VDAs

The statute should provide that controllable VDAs can be the subject of proprietary rights. This would codify the direction of Rhutikumari while leaving detailed classification to Indian law.

Define control

India should adopt a DAPL-inspired control standard based on factual ability to obtain benefit, exclude others and transfer control. The definition should address private keys, hosted wallets, multi-signature arrangements and custodial structures.

Create custody and client-asset rules

Custodians should be required to keep records, safeguard assets, separate client assets from house assets, disclose whether an arrangement is custody or unsecured delivery, and maintain adequate systems for pooled holdings.

Address insolvency and shortfalls

Client assets maintained by a custodian should be excluded from the custodian's creditor estate. Shortfalls in pooled assets should be allocated by clear statutory formula.

Enable VDA collateral

Digital assets should be capable of serving as collateral. Control should be an available perfection method, and priority should favour secured creditors with control over those relying only on other methods.

Adopt conflict-of-laws rules

A waterfall based on asset-specified law, system-specified law, issuer seat and forum rules should be considered for proprietary issues.

Coordinate with the Securities Markets Code

The Securities Markets Code should govern security-like tokens, while the private-law VDA statute should govern proprietary consequences of controllable digital assets more broadly.

12. Conclusion

India has made significant progress in recognising and supervising VDAs through taxation, AML/FIU reporting, and technology-neutral securities-law analysis. However, those developments do not substitute for private-law certainty. The most difficult VDA disputes are likely to concern ownership, custody, exchange failure, hacks, frozen accounts, cross-border restructuring, collateral enforcement and downstream transferees. These are precisely the problems DAPL addresses.

A UNIDROIT-aligned Indian framework would not require India to abandon its cautious approach to cryptocurrency. Nor would it require treating all VDAs as securities or legal tender. It would simply provide predictable private-law consequences for digital assets that are capable of control. Such a reform would strengthen user protection, support legitimate market development, reduce litigation uncertainty and better align India with emerging international private-law standards.

Appendix A: Comparative Tables

Category	India current/proposed	UNIDROIT DAPL	Recommended for India
Regulatory purpose	Tax, AML, securities perimeter and judicial remedies	Private-law proprietary infrastructure	Adopt complementary private-law legislation
Technology neutrality	SMC technology-neutral for securities	Technology and business-model neutral throughout	Use substance-over-form across VDA law
Custody	No comprehensive private-law custody regime identified	Custody agreement, duties, segregation, insolvency exclusion	Create statutory VDA custodian duties
Exchange insolvency	Open questions in case materials	Client assets excluded; pooled shortfalls allocated	Codify client asset protection and shortfall rules
Tokenised securities	Remain securities if legally securities	Linked asset effect depends on other law	Coordinate securities law with linked asset private law

Pure cryptocurrency	Outside SMC unless security-like	Digital asset if controllable	Create non-securities private-law treatment
Conflict rules	Cross-border uncertainty	Applicable-law waterfall	Adopt DAPL-style choice-of-law rules

Appendix B: Endnotes and Authorities

1. UNIDROIT Principles on Digital Assets and Private Law, 2023, Principles 1-3 and Commentary 0.5-0.19, 1.1-1.3, 2.1-2.31 and 3.1-3.12.

2. UNIDROIT Digital Assets and Private Law Principle 6 and Commentary 6.1-6.17.

3. UNIDROIT Digital Assets and Private Law Principles 8-9 and Commentary 8.1-9.3.

4. UNIDROIT Digital Assets and Private Law Principles 10-13 and Commentary 10.1-13.10.

5. UNIDROIT Digital Assets and Private Law Principles 14-17 and Commentary 14.1-17.9.

6. UNIDROIT Digital Assets and Private Law Principles 5, 18 and 19 and related Commentary.

7. Securities Markets Code 2025/2026 Standing Committee materials, Chapter XX on Investment Schemes and discussion of Virtual Digital Assets.

8. Income-tax Act 1961, section 2(47A), section 115BBH and section 194S, as discussed in the Indian VDA materials.

9. Internet and Mobile Association of India v Reserve Bank of India (2020) 10 SCC 274.

10. Rhutikumari v Zanmai Labs Pvt. Ltd., High Court of Madras, O.A. No. 194 of 2025, decision dated 25 October 2025, as summarised in the provided case notes.

11. Aditya Malhotra & Ors. v Union of India & Ors., High Court of Delhi, W.P.(C) 197/2025, decision dated 11 February 2026, as summarised in the provided case notes.

12. Shailesh Babulal Bhatt v State of Gujarat & Anr., Supreme Court of India, SLP (Crl.) No. 4036/2025, order dated 30 May 2025, as summarised in the provided case notes.

13. CBDT/CARF reporting note on Reporting Crypto-Asset Service Providers, due diligence, reporting duties and record retention, as summarised in the provided