



CRYPTOASSETS, DEFI REGULATION AND DLT:

Proceedings of the II Token World Conference

DIRECTOR

JAVIER IBÁÑEZ JIMÉNEZ

Cofounder & CITT Head
(Alastria Blockchain Ecosystem)

Profesor Ordinario de Derecho Mercantil
Universidad Pontificia Comillas

DERECHO DE
BLOCKCHAIN Y
DIGITALIZACIÓN
DE LA SOCIEDAD



ALASTRIA

REUS
EDITORIAL



COMILLAS
UNIVERSIDAD PONTIFICIA

ICAI ICADE CIHS

DERECHO DE BLOCKCHAIN Y DIGITALIZACIÓN DE LA SOCIEDAD

PRINTED TITLES

Consortio Red Alastria (Origen y reforma de la primera blockchain de España), *Javier Ibáñez Jiménez* (2020).

Alastria mission and vision: a multidisciplinary research, *Javier Ibáñez Jiménez (coord.)* (2020).

Tokens valor (security tokens): Régimen de los criptoactivos negociables y sus mercados (MICAs), *Javier Ibáñez Jiménez* (2021).

Token Law and Markets: Proceedings and keynote speeches of the I Token World Conference, *Javier Ibáñez Jiménez (dir.)* (2021).

Cryptoassets, DeFi Regulation and DLT: Proceedings of the II Token World Conference, *Javier Ibáñez Jiménez (dir.)* (2023).

**DERECHO DE BLOCKCHAIN
Y DIGITALIZACIÓN DE LA SOCIEDAD**

Director: JAVIER IBÁÑEZ JIMÉNEZ

**CRYPTOASSETS,
DEFI REGULATION AND DLT:
Proceedings of the II Token World
Conference**

DIRECTOR: JAVIER IBÁÑEZ JIMÉNEZ

Full Professor of Commercial Law (Comillas University)
Alastria Co-Founder and CITT Head

First edition

JÖRN ERBGUTH JAVIER IBÁÑEZ
STEFFEN SCHWALM MATTHIAS FISCHER
RICARDO PALOMO FILLIPO ZATTI
ANTONIO SERRANO ROSA BARRESI
SAGRARIO NAVARRO CARLOS DE CORES
ANA FELÍCITAS MUÑOZ JOACHIM SCHWERIN
JEAN-MARC SEIGNEUR SUZANA MARANHÃO



Madrid, 2023

© Each author

© Editorial Reus, S.A.

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law. For permission requests, write to the publisher, addressed "Attention: Permissions Coordinator," at the addresses below.

C/ Rafael Calvo, 18, 2º C – 28010 Madrid

Phone: +34 91 521 36 19

reus@editorialreus.es

www.editorialreus.es

1.ª edition REUS, S.A. (2023)

ISBN: 978-84-290-2704-4

Legal Deposit: M-627-2023

Design of the cover: Editorial Reus

Printed in Spain

Printed by: *Ulzama Digital*.

INDEX

Presentation, JAVIER IBÁÑEZ JIMÉNEZ	13
Banks and crypto-asset service providers between financial and data protection regulations, JÖRN ERBGUTH	15
I. Introduction	15
II. On-chain transaction data	16
III. Controller of the on-chain data	17
IV. Possible Justifications.....	19
V. Unwanted token transfers	21
VI. Conclusion.....	22
The (not only) social impact of the eIDAS 2.0 digital identity approach in Germany and Europe, STEFFEN SCHWALM	23
I. Introduction and current status of digital identities in Germany and Europe	23
II. Core changes in proposal of eIDAS 2.0.....	26
II.1. Overview	26
II.2. Main changes on electronic identification and European Digital Identity Wallet	27
II.3. Main changes regarding (qualified) trust services and trust service providers	30
III. Possible impacts of eIDAS 2.0	30
III.1. Chances and risks of eIDAS 2.0.....	30
III.2. Trustworthy decentralization with eIDAS 2.....	33
V. Outlook.....	34
VI. Bibliography.....	35
Metaverse Tokenized Economy: Key Reflections, RICARDO PALOMO	39
I. Introduction	39

II. Metaverse: A new world for the new metaeconomy.....	40
III. Tokenization in a dual economic system?	42
IV. Conclusions.....	46
V. References.....	46
Entrepreneurs and enterprise in the metaverse: Legal challenges of the metaverse economy, ANTONIO SERRANO ACITORES.....	49
I. Introduction.....	49
II. The metaverse economy	51
II.1. Historical background	51
II.2. The new digital economy: from the data economy to the metaverse economy	52
III. Conceptualising the metaverse.....	55
IV. Characteristics of the metaverse.....	57
V. Activities to be developed in the metaverse	60
VI. Legal challenges of the metaverse economy	61
VI.1. The big questions.....	61
VI.2. Main legal risks of the metaverse.....	62
VII. Conclusions.....	64
VIII. Bibliography	65
DLT governance and accountability in the value chain: The issuance of governance tokens, MARÍA DEL SAGRARIO NAVARRO LÉRIDA.....	67
I. Foreword	67
II. How does the blockchain understand the firm as a network?	71
III. Value chain in a decentralized reality: DAOS and tokenization	73
IV. References.....	75
“Token governance in DAOs”, ANA FELÍCITAS MUÑOZ PÉREZ	77
I. General overview	77
1. General definition of DAO	77
I.2. A general approach of certain features and legal issues of DAOs	79
I.3. Legal wrapper as a tool of personification and risk of token recharacterization.....	81
I.4. DAOS: movement towards greater private ordering or towards the “Commons”?.....	82
II. Participation in DAOs.....	84
II.1. Tokens as means and “title” of participation	84
II.2. Content of governance tokens.....	86
III. The process of foundation and Governance tokens distribution	87
IV. Government.....	89
IV.1. Government on the chain and off the chain.....	89
IV.2. Issues of governance	91

IV.3. Issues to the nature of the means of participation	92
V. Conclusion	93
DLT governance and EU investment token supervision policy issues,	
JAVIER IBÁÑEZ JIMÉNEZ	95
I. Introduction to DLT network governance	96
I.1. Definition of DLT network governance according to interna- tional standards	96
I.2. Inner and outer blockchain network governance matters	98
I.3. Latest developments: inner/outer linkage enhancement and diversification.....	99
II. The position of internal and external governance in the architecture of DLT blockchain networks and its relevance for the blockchain ecosystem.....	102
II.1. Theoretical location of governance in the layers of the blockchain architecture: a synthetical approach according to telecommuni- cation global standards	102
II.2. Relevance of the explained position for the structure of a blockchain ecosystem.....	103
III. Investment tokens in a blockchain ecosystem	106
III.1. Tokens and investment tokens: notion and boundaries	106
III.2. Significance of token trading for a blockchain permissioned ecosystem	107
III.3. The need of investment token supervision for a proper trusted blockchain network development: trusted trading applica- tions.....	107
IV. A simplified introductory approach to key MiCA Supervision issues.....	109
IV.1. Supervision principles	109
IV.2. Some token-supervision rules: ART / EMT asset reserve con- trol; market abuse	110
V. Specific questions posed by NFT supervision	111
V.1. The 2021 amendments and the MiCA coverage of the bulk of the NFTs	111
V.2. The key features of a traded token: number and market (ESMA objective approach) vs issuer and investor purpose (SEC sub- jective approach).....	112
VI. MiCA regulatory policy assessment: the monetary policy and mar- ket stability EU regulatory design bias.....	113
VII. The IOSCO balanced global perspective for investment and market protection	114
VIII. Conclusion	115

The blockchain and token startup capital financing landscape, MATTHIAS FISCHER.....	119
From wallets to universal access device?, ROSA GIOVANNA BARRESI & FILIPPO ZATTI.....	127
I. Introduction.....	128
II. ‘Transactions’ in the digital space.....	131
III. Offline transaction execution: searching for a device with the required features.....	132
IV. UAD: Risk or opportunity?.....	133
IV.1. A different model for innovation.....	133
IV.2. The RasPi and the ‘DEVELOPER’ toolchain.....	134
IV.3. Improving by experiment.....	134
V. Criteria governing an offline transaction.....	135
V.1. Definitions.....	135
V.2. Rules.....	135
VI. Possible attacks against an offline transaction protocol: <i>Bellum omnium contra omnes</i>	136
VII. Our approach.....	137
VII.1. Offline transaction as a fair Two-Party Computation.....	137
VII.2. Secure processors.....	138
VII.3. Transactions privacy in an international dimension.....	138
VIII. Conclusions.....	139
Civil liability of token issuers, CARLOS DE CORES HELGUERA.....	141
I. Introduction.....	142
II. European regulation on virtual assets.....	144
III. Civil liability of the issuers of virtual assets. Introduction.....	145
III.1 Liability arising from noncompliance of information duties ...	146
III.1.1. <i>Regulation insights</i>	146
III.1.2. <i>The nature of issuers’ civil liability deriving from noncom- pliance of information duties</i>	149
III.2 Liability arising from other sources.....	150
Towards the New EU Token Economy, JOACHIM SCHWERIN.....	155
I. Flashback to Autumn 2008: Sunset of an Old Era, Sunrise of a New One.....	156
II. Tokenisation opportunities in finance.....	157
III. Industry processes and value chains.....	158
IV. A new approach for Digital Self-Governance: the token economy.	159
V. Where are we? Decentralisation continues.....	160
VI. We are in a critical juncture.....	162

Annex

TOKEN WORLD CONFERENCE 2022 AGENDA	165
Presentation: Suzana Maranhão and Jean-Marc Seigneur	170

The evolution of the MiCA Regulation and other key laws of the EU Digital Finance Strategy, the nature of NFT tokenisation and trading, the tokenomics of the metaverse, and relevant token data protection issues, are encompassed in this volume, edited to publish the contents of the II Token World Conference proceedings.

2022 was the second year in which a Token World Conference took place as a result of a joint initiative of the Alastria Blockchain Ecosystem -Alastria Networks Consortium- / Comillas University -FinTech Observatory-/ URJC - DYDEM that has successfully brought together the visions and experiences of world-leading experts in DLT legal issues, within the fields of DeFi regulation, MiCA investment services, crypto-asset exchanges, CBDCs and DAO governance, amongst others. No doubt the reader will find herein fundamental and inspiring ideas to be set in legal and financial practice for the future of tokenization and token markets.

As we could hear within the closing speech of the Conference from Joachim Schwering, Principal Economist at the EU Commission (EC) and promoter of the Tokenise Europe 2025 initiative spearheaded by German Banking Association and the EC, the potential of asset tokenisation and metaverse to strengthen entrepreneurial competitiveness —mainly of startups— should be prioritized viewing the 2030 horizon, to bring long-term financial stability, economic resilience and security in the context of the forthcoming DeFi/MiCA scenario. A huge challenge requiring digital skills from policymakers and regulators, like data literacy, problem-solving with digital tools, public-private co-learning in sandboxes and digital hub enhanced development.

Director: JAVIER IBÁÑEZ JIMÉNEZ

JÖRN ERBGUTH JAVIER IBÁÑEZ

STEFFEN SCHWALM MATTHIAS FISCHER

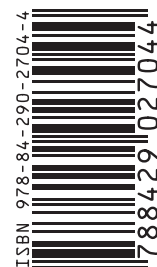
RICARDO PALOMO FILLIPO ZATTI

ANTONIO SERRANO ROSA BARRESI

SAGRARIO NAVARRO CARLOS DE CORES

ANA FELÍCITAS MUÑOZ JOACHIM SCHWERIN

JEAN-MARC SEIGNEUR SUZANA MARANHÃO



9