Nordic Blockchain Conference

BLOCKSTAND

Promoting the uptake of Blockchain Technology through Standards: Workshop on Smart Contracts & Blockchain Sustainability

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CEN/CENELEC JTC 19 WG 2 - Environmental Sustainability for Blockchain and DLT

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Chairman of Programmatic
ISO TC 307 - Blockchain and distributed ledger technologies

Funded by the European Union

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BLOCKCHAIN - DLT SUSTAINABILITY

Belen Suarez

GO TO INNOVATION INTELLIGENCE

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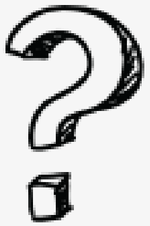
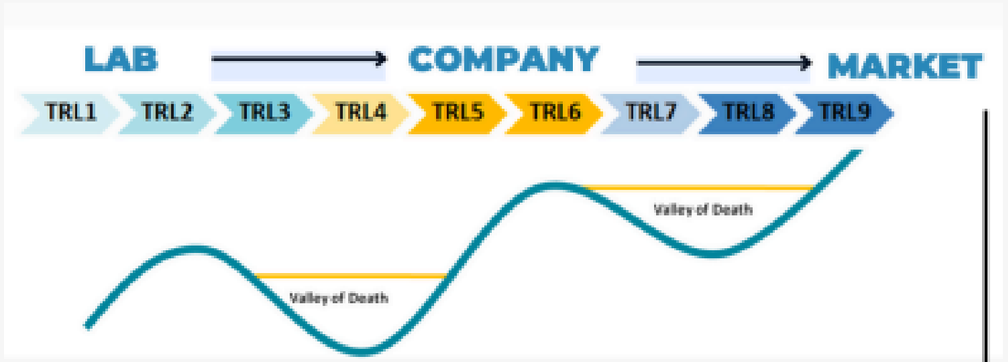
Adoption barriers?

- Complexity
- Security
- Interoperability
- Cost of Implementation
- Regulatory requirements
- Demostrate the Value proposition
- Stakeholders engagement
- Scalability

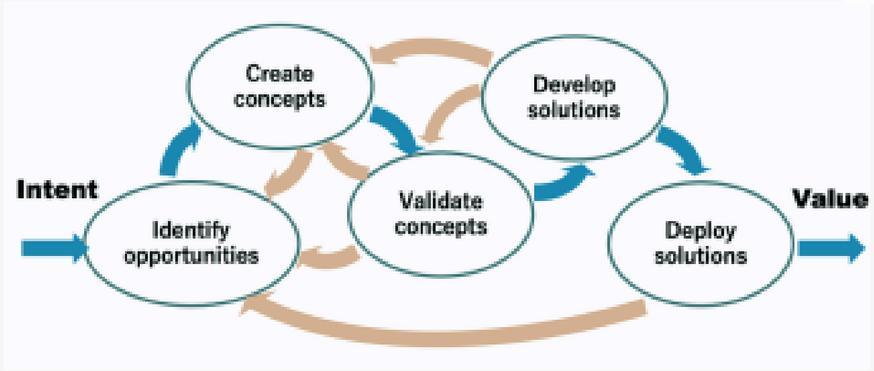
Competitiveness & Growth

- Identify oportunities and manage risk
- Create and validate concepts
- Develop solutions
- Engage stakeholders and partners
- Reach and allocate resouces
- Cope with uncertainties
- Attract and maintain talent
- Protect the knowledge and solutions
- Enter and scale solutions in the market
- Measure and manage innovations
- Provide assurance to third parties





Leadership & Strategy



- Vocabulary
- Guidelines for governance
- Use cases
- Reference architecture
- Identity management
- Privacy
- Security Management
- Auditing Guidelines
- Smart Contracts
- DAO Governance, etc

- Decentralized Identity Management
- **Environmental Sustainability**

CEN/CENELEC JTC 19 WG 2
Environmental Sustainability for Blockchain and DLT

TR- Environmental and Sustainability classification metodology of consensus mechanisms.

TS - SustainabilityTaxonomy of applications based on Blockchain and DLT´s.

CEN/CENELEC JTC 19 WG 2

Environmental Sustainability for Blockchain and DLT

ISO 14000 Series

ISO 14020 Environmental labels and declarations — General principles

Credible | Evidence-based | Transparent | Life-cycle

Data availability
Data reliability
Harmonized indicators
Proper Methodology
Reporting

Proportionality
Materiality
Innovation
SME inclusion
Single Market

Comparability among solutions -harmonize methodologies

Grant Faint/Getty Images

Why engage in standards setting?

BLOCKSTAND

WHY

Benefits

Short-term and long-term benefits and a sustainable competitive advantage by:

- Opportunity to learn and discuss ideas
- Networking for partnership alliances
- To gain recognition in the industry and among customers taking an active/leading role
- Ensure the final standards best meet market and SME needs
- Timely access to knowledge
- Vigilance on future standards & and regulations,
- Eventually influences capacity

Leading

MARKET

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Belén Suarez
BlockStand Expert
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GO TO INNOVATION INTELLIGENCE

Thanks!!

- Convenor ISO TC 307 Blockchain and DLTs WG5 **Governance**
- Convenor CEN/CENELEC JTC 19 Blockchain and DLTs WG2 **Environmental Sustainability**
- **Expert ISO** TC 279 **Innovation Management**
- Expert ISO TC 207 **Environmental Management**
- CEN/CENELEC WG **DPP** SBS Expert

European DIGITAL SME Alliance

Nordic Blockchain Conference

20th June 2024

www.digitalsme.eu

Promoting the uptake of Blockchain Technology through Standards: insights from Smart Contracts and Blockchain Sustainability

Blockchain Standardisation for European SMEs

Standardisation Aspects. Importance, Challenges, and the Role of Smart Legal Contracts. Navigating the Future of Blockchain for SMEs

programmatic

INDUSTRIA

Meet the Speaker: Petko Karamotchev

- Position: CEO and Co-Founder of INDUSTRIA, Chairman of Programmatic, BlockStand Expert
- Role in BlockStand (Addressing on-ledger and off-ledger data in blockchain, Researching challenges and opportunities in standardization, Developing draft standards for interoperability, security, and data efficiency, Conducting pilot testing of draft standards)

Why Standardisation Matters?

- Uniformity across the European Market
- Improved interoperability between businesses
- Ensures security and trust in transactions
- Streamlines regulatory compliance and oversight
- Facilitates adoption and scalability

Major Challenges

- Variance in regulatory environments across countries (MiCA is not enough)
- Technical disparities and evolving technologies
- Concerns over privacy and data protection (public vs private systems)
- Resistance from traditional systems and stakeholders
- High initial costs and lack of expertise

Smart Legal Contracts: A Game Changer

- Automation of contractual obligations
- Increased transparency and trust
- Reduction in disputes and enhanced enforcement
- Tailored to suit diverse business needs
- Seamlessly integrates with blockchain infrastructure

Hurdles in Smart Contract Implementation

- Legal recognition across jurisdictions
- Technical complexities and lack of expertise
- Concerns over immutable errors
- Need for hybrid systems (traditional + smart contracts)

Navigating the Future of Blockchain for SMEs

- Collaborative efforts for standardisation
- Investment in blockchain education and training (CHAISE)
- Encourage pilot projects and real-world testing (EBSI)
- Engage legal experts in smart contract development (Programmatic)
- Adopt a proactive and adaptable approach

Introduction to BlockStand

- BlockStand: Empowering Blockchain Standardization
- Objective: Promote the uptake of Blockchain Technology through Standards
- Focus Areas (Smart Contracts, Blockchain Sustainability
- Key Questions (What is blockchain standardization? How can companies benefit from it?)
- What challenges and opportunities exist for the EU industry?

Why Blockchain Standardization Matters

- Impact on Industry: Ensures that blockchain standards reflect European values and needs
- ISO/TC 307: Focuses on use cases, interoperability, cybersecurity, and more
- Funding: €400,000 allocated to support European experts in standardization

Petko Karamotchev's Contributions to BlockStand

- Research Focus (Current state of on-ledger and off-ledger data, Core challenges: interoperability, security, efficiency)
- Standard Development (Drafting comprehensive standards, Real-world pilot testing with volunteer organizations)
- ISO TC 307 Participation: Active involvement in blockchain and DLT standardization

The Vision Ahead for BlockStand

- Ongoing Efforts (Increased expert participation, Development of new standards)
- Future Goals (Enhance blockchain technology adoption in the EU, Ensure standards align with sustainability and regulatory needs)

Engage with Us: Q&A

- How can you get involved?
- Questions about blockchain standardization
- Insights from practical examples

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Empowering European Experts' leadership in Blockchain Standardisation

Funded by
the European Union

BLOCKSTAND

European DIGITAL SME Alliance

INATBA
International Association for Trusted Blockchain Applications

Small Business Standards

UNINFO

Objective I

Support the **implementation of the Rolling Plan for ICT Standardisation** in international and European blockchain/ Distributed Ledger Technology (DLT) standardisation scenes

Objective II

Reinforce the link with the European Blockchain Services Infrastructure (EBSI) and the European Blockchain Partnership (EBP)

Objective III

Support the participation of European standardisation experts, particularly from European start-ups, SMEs, academia and independent experts, in international and European Standard Developing Organisations

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BLOCKSTAND PARTNERS

European DIGITAL SME Alliance

- **DSME:** Project leader representing over 45k digital SMEs and engaged directly in standardisation activities - ETSI board member, member of EC MSP on ICT Standardisation and its TF Rolling Plan

INATBA
International Association for Trusted Blockchain Applications

- **SBS:** annex III organisation representing SMEs in standardisation according to Regulation (EU) 1025/2012. Involved directly in International and European Standardisation organisations.

Small Business Standards

- **INATBA** can leverage blockchain standardisation at a global forum to interact with regulators and policymakers and bring blockchain technology to the next stage.

UNINFO

- **UNINFO:** is the UNI's Associated Body to whom UNI (the Italian national standardisation body) has delegated the Information Technologies field.

BLOCKSTAND

BlockStand.eu – community of blockchain / DLT standardisation experts meeting under our **Blockchain Standardisation Facility & Community Tool**

Report

on Blockchain inclusion to the Rolling Plan

Experts' Selection Process

with 400 000€ made available (min. 30-40 funded experts)

Repository

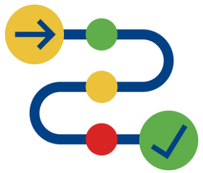
of Blockchain standardisation activities

Standardisation

Gaps & Recommendations' Atlas

BlockStand Stakeholder Forum

Community of blockchain and DLT experts interested in standardisation activities



European Blockchain Standardisation Roadmap

Experts' success stories

Europe's Blockchain Leadership Outlook

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Selection of Experts

- The selection process is open for submissions and evaluations take place every two months.
- **Next cut-off date: 15 August 2024.**
- **Priority**: contributions in the areas of the Rolling Plan on ICT Standardisation
- **Types of deliverables**: technical (meetings) reports; new work items suggested in TCs; blockchain standards use cases; other outputs linked to participation in TCs of the European and international SDOs; etc.

Total amount: 400.000 EUR

- **30-40 experts** and **100** expert contributions
- **4.000 €** for each contribution (max. 3)
- Choice between **short-term** (3 months / 1 deliverable) or **long-term** (6-9 months / 2-3 deliverables) contributions

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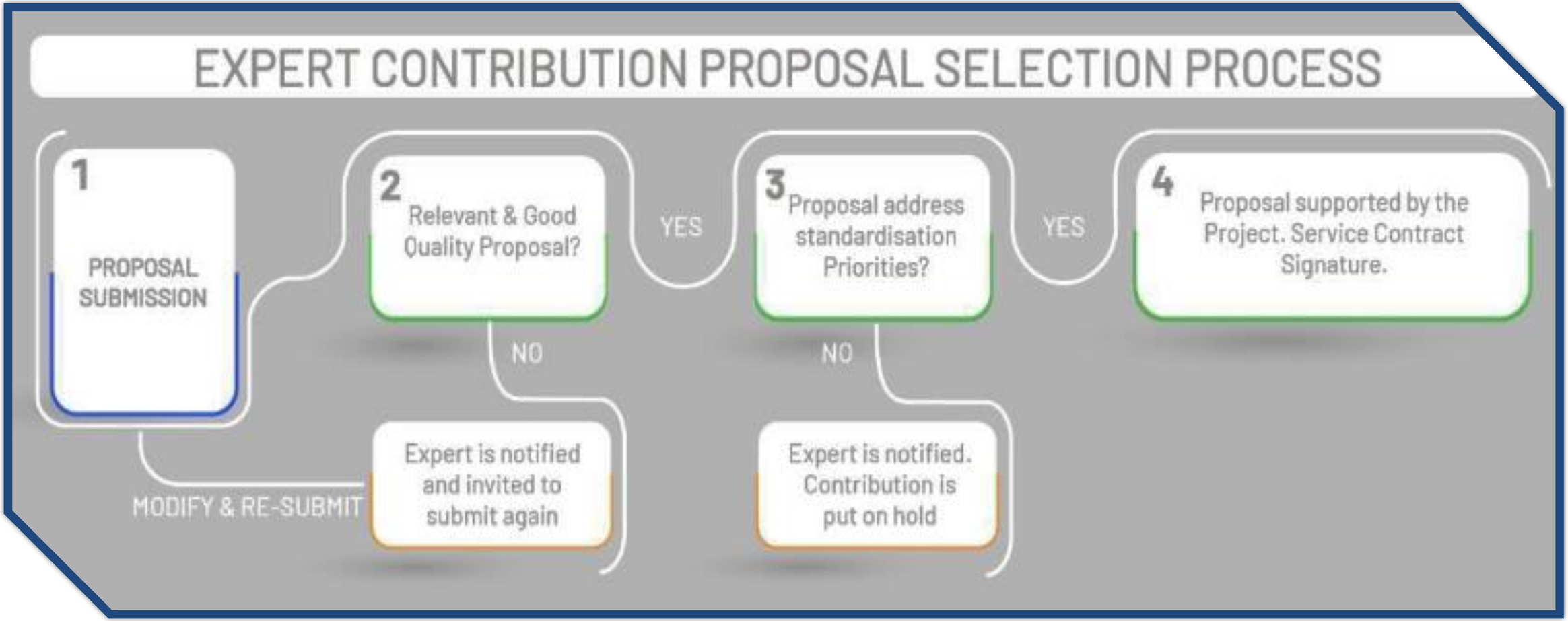
Proposals selection process



Selection of Experts – eligibility criteria

BlockStand is looking for experts that:

- Are individuals or natural persons residing in European Member States and are affiliated to entities established (or having significant business interests) in the EU Member States
- Have profound knowledge in the Blockchain, DLT and related fields and experience regarding developments of standards, e.g., in SDOs
- Are not already receiving financial support for the same proposed activities

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Selection of Experts – Evaluation Criteria 1

Table 4. Selection Step 1 - Relevance & Quality of the proposal

Eligibility (all three criteria MUST be satisfied)	Excellence & Implementation (Max points 6; threshold: 4)	Impact (Max points 6; threshold: 4)
The proposing experts represents / is affiliated with the European body (European SME, big company, research institution, etc.) The proposing expert has not received the lump-sum support more than 3 times The expert confirms that the same contribution is not presented as an output for the EU-funding elsewhere (e.g., it is not expert's deliverable for StandICT, SBS, etc.)	Proposing expert's experience/ knowledge of the subject Proposing expert's experience with standardisation processes Timeline for the proposed contribution is feasible	The proposed contribution addresses listed priorities or provides clear evidence for the unlisted priority (in the latter case – The External Management Board ranks this aspect) The proposed contribution has wider impact on blockchain or its use cases' development The proposed contribution has a potential of the follow-up activities / further use of it.

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Selection of Experts – Evaluation Criteria 2

Table 5. Selection Step 2 – Standardisation Prioritisation

Based on the achievement of the below prioritisation criteria (given between 1 and 3 points for criteria I-V and up to 5 points for criteria VI), the amount of the points will be summed up with the points received in the STEP 2, and the experts will be prioritised.	
I. Variety of addressed priorities	Is the contribution addressing one of the priorities where a few (or none) contributions have been made so far?
II. Participation in diverse SDOs / prioritisation of international SDOs	Is the contribution addressing standards / technical committees where little (or none) work has been done so far by the project experts? Is the suggested contribution linked to the work at the international or European SDO?
III. Representation of the target groups	Is the proposing expert helping to achieve the balance in expert representation (in terms of experts coming from SMEs / big companies / research community / European NGOs)?
IV. Gender balance and expert diversity	Is the proposing expert contributing to ensuring the gender balance of the supported experts? Is the expert representing unrepresented (or less represented) age group?
V. Environmental impact	Is the proposed contribution addressing environmental sustainability? What will be the impact of the proposed contribution / its outcome to the circularity and greening of the economy, sustainability?
VI. Expert leadership/ participation of new experts	Is the proposing expert aiming at the leadership position? Is the proposing expert a new unexperienced expert willing to get engaged into standardisation and grow to the leadership positions in the future?

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Participating experts

EXPERTS' NUMBERS

17 TOTAL EXPERTS

14 MALE
3 FEMALE

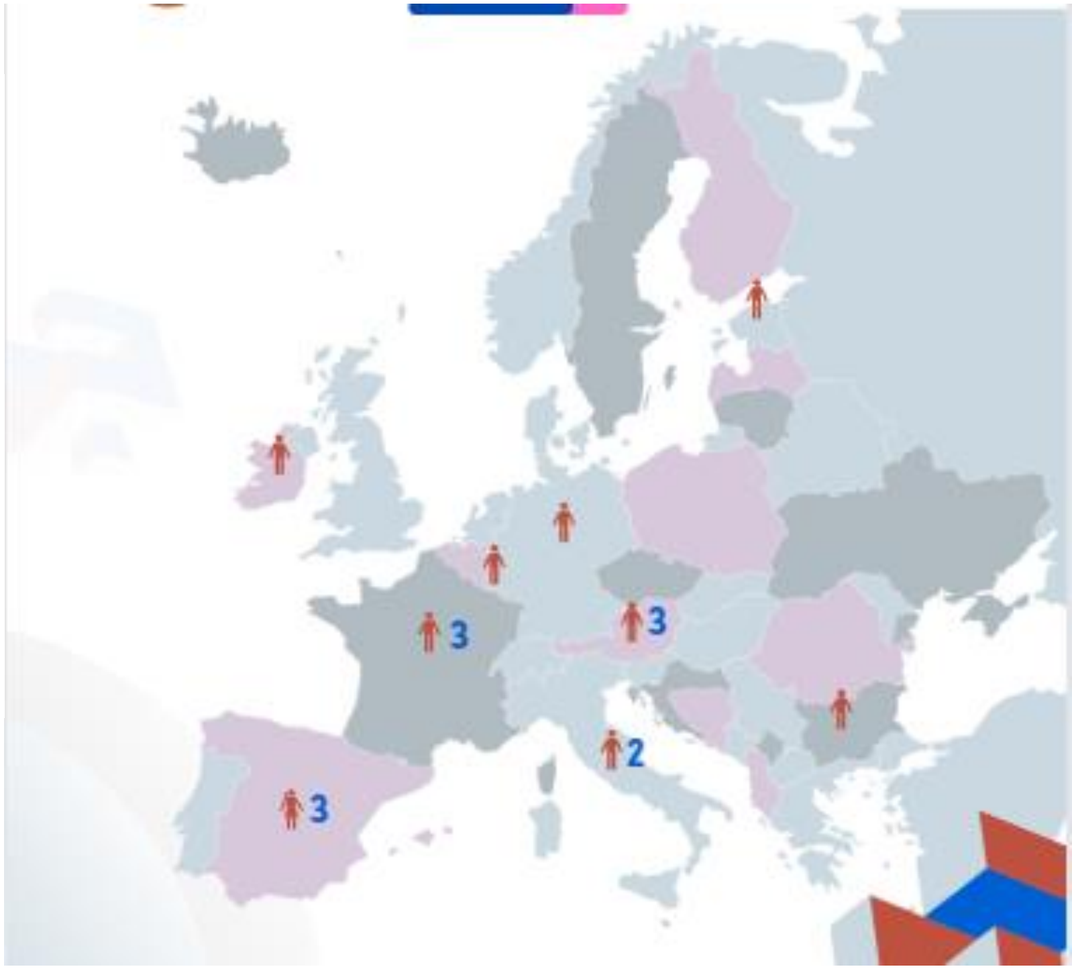
GRANT TYPE

13 LONG-TERM
4 SHORT-TERM

FUNDED

40 DELIVERABLES

160.000 EUR TOTAL



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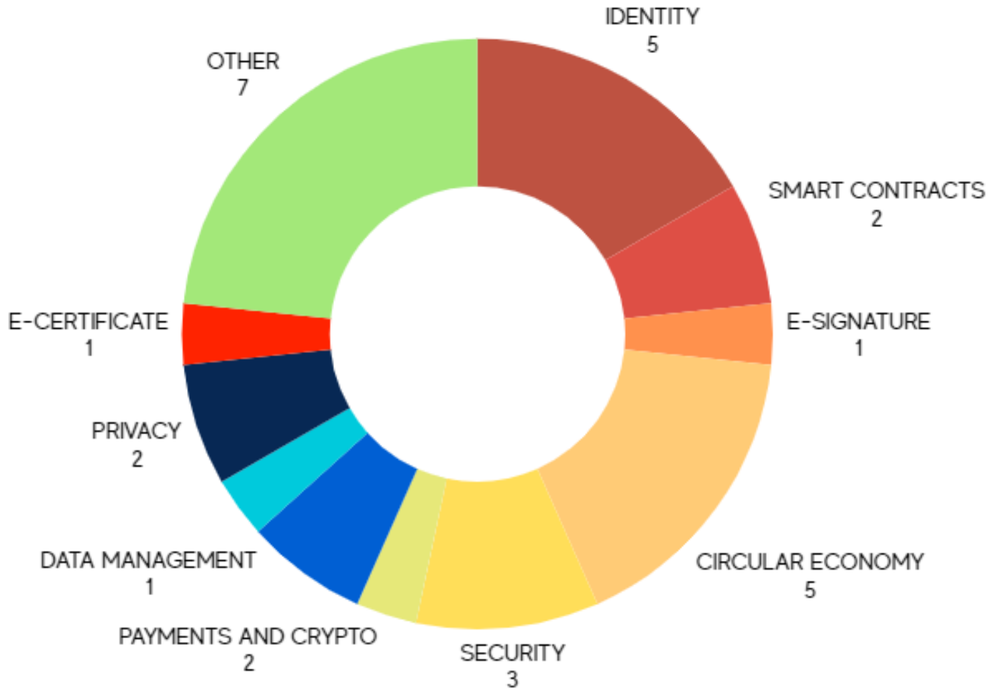
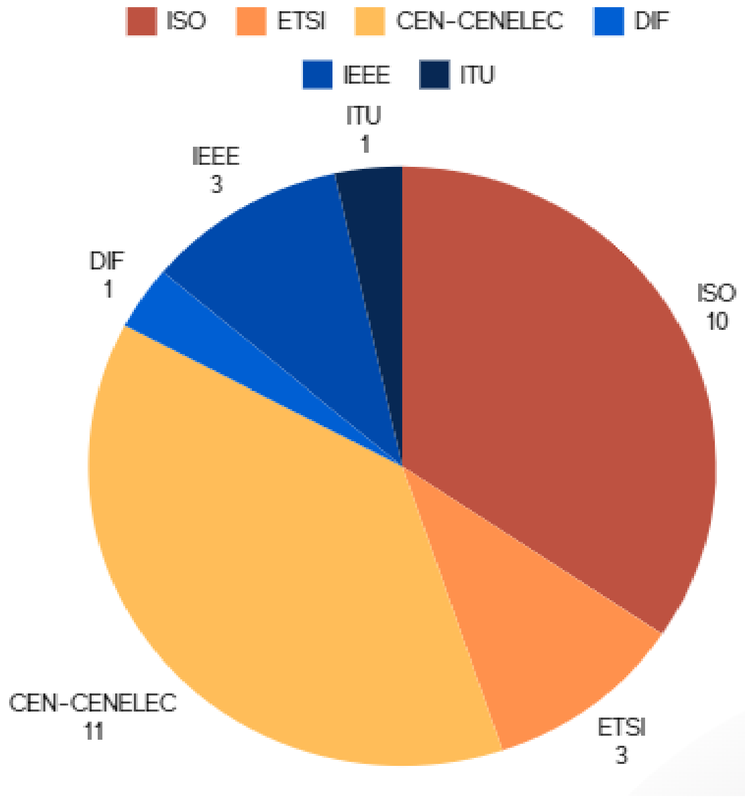
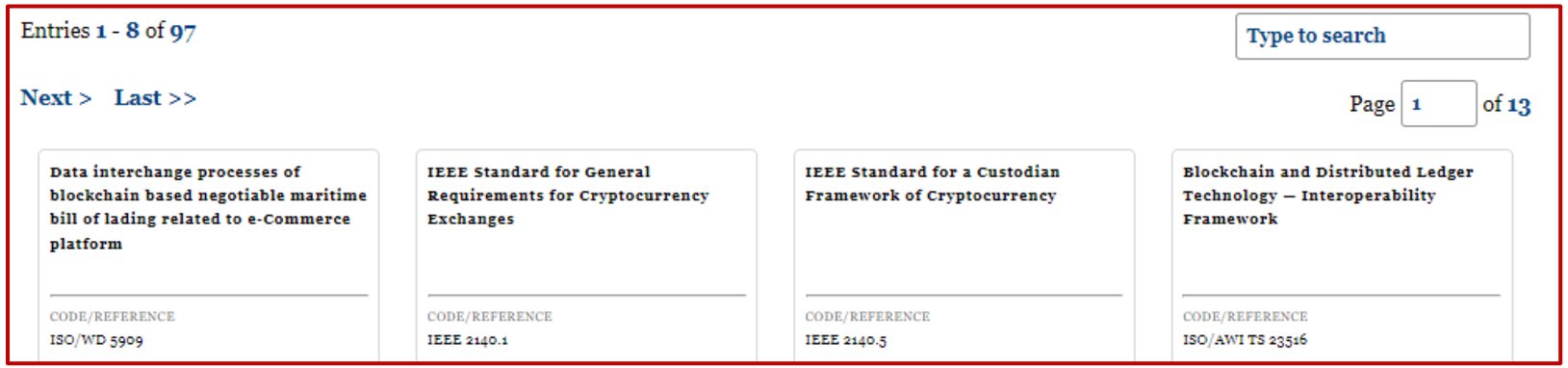




BLOCKSTAND

Online Repository of blockchain and DLT standards



TITLE
Blockchain and distributed ledger technologies — Guidelines for governance

CODE/REFERENCE
ISO/TS 23635

ABSTRACT/SCOPE
This document provides guiding principles and a framework for the governance of DLT systems. The document also provides guidance on the fulfilment of governance, including risk and regulatory contexts, that supports the effective, efficient, and acceptable use of DLT systems.

COMMITTEE/GROUP
ISO/TC 307/WG 5

DOCUMENT TYPE
Technical Specification TS

REGION
International

STANDARD DEVELOPING ORGANISATION
ISO

APPLICATIONS
applications-in-banking applications-in-other-fields it-security

KEYWORDS
blockchain distributed-ledger security accountability interoperability

YEAR OF PUBLICATION
2022

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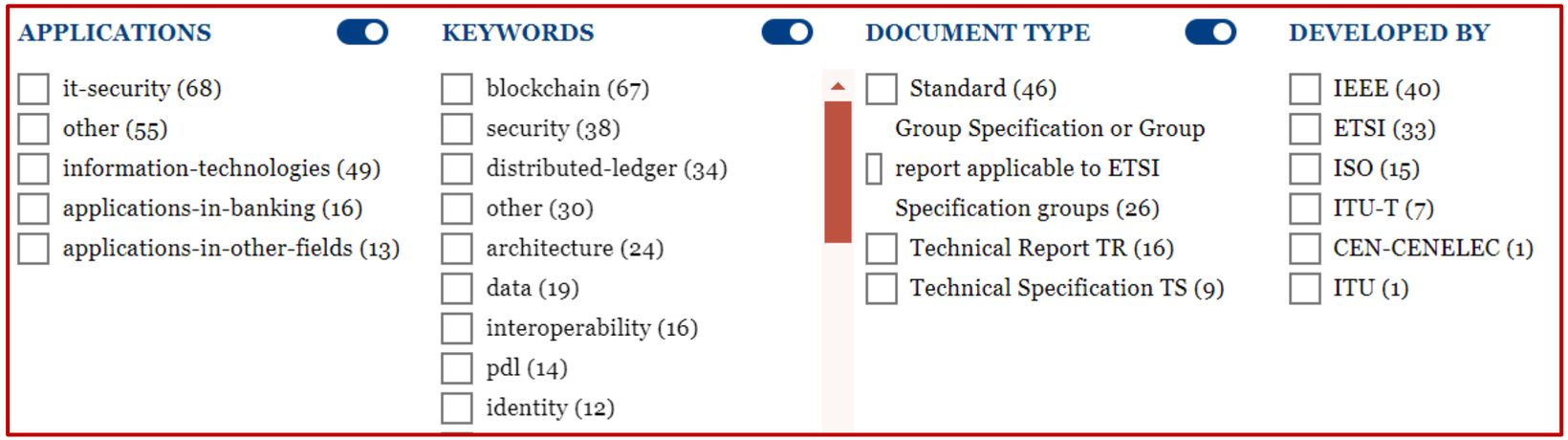
Online Repository of blockchain and DLT standards



BlockStand & DIGITAL SME Focus Group Blockchain

The FG is an open community for all interested stakeholders, which allows to:

- foster leadership and expertise in topics relevant to sectoral experts engaged in blockchain technology
- raise awareness around the use of blockchain technology, promoting best practices and use cases;
- tackle matters with specific focus on standardisation issues;
- promote relevant funding opportunities;
- participate in B2B & matchmaking.

BLOCKSTAND

DIGITAL SME is collecting blockchain services and use-cases to promote the SMEs active in the sector.

Join our catalogue of Blockchain solutions!

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Thank you for your attention!

Any questions?

For more information:

- Gabriele Casalini (g.casalini@digitalsme.eu)

Website:

Social media

BlockStand.eu