ISO’s work on Blockchain

WIPO – 2019-04-29

ISO snapshot

We are an independent,
non-governmental organization

We are a global network of national standards bodies with one member per country

Our job is to make
International Standards

We are coordinated by a
Central Secretariat in Geneva, Switzerland

We are not for profit: selling our standards allows us to finance their development in a neutral environment, to maintain them and to make new ones

ISO provides a platform for developing practical tools through common understanding and cooperation with all stakeholders

164
members

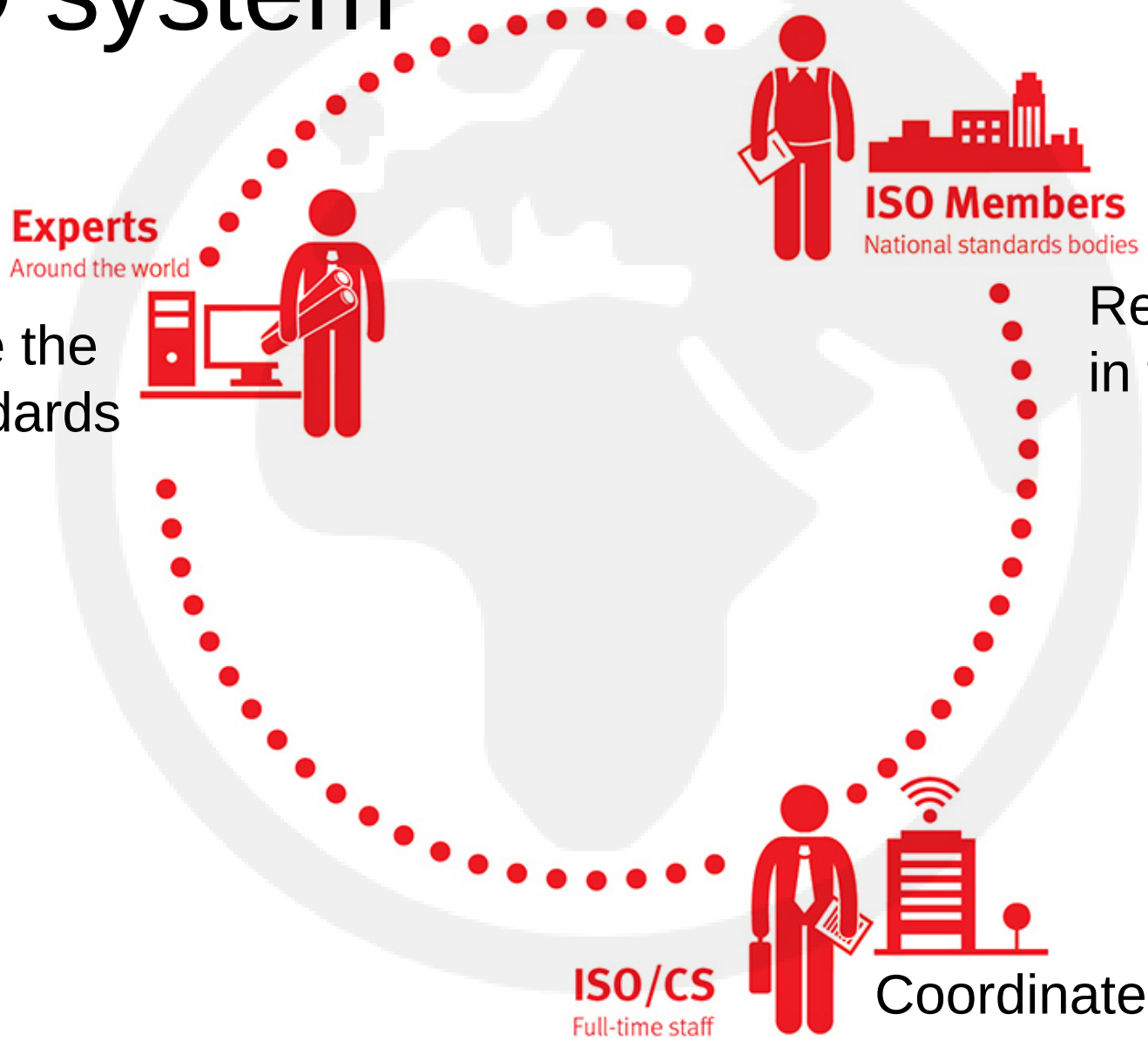
22000+
International Standards

300+
technical committees

100
new standards each month

The ISO System

The ISO system



Write the standards

Represent ISO in their country

Coordinates system

What experts do

- Write the standards
- Nominated by members but can also come from partner organizations like the United Nations and other key players

What members do

- Represent ISO in their country
- Approve standards by voting
- Enable national experts and stakeholders to participate in standards development
- Propose new standards

What ISO/CS does

- Facilitates participation in standardization
- Provides a neutral platform for the experts to get together and achieve consensus
- Coordinates the standards development process

Benefits of international standardization in technology fields

Design and development

- Allow development of modular systems – multiple independent innovations of components
- Causes positive network effects (e.g., common hardware standards attract more vendors to develop software)

Confidence

- Standard-setting processes can improve the utility and adoption rate of standardized technologies
- Establish best practices and common frameworks from which to innovate

Blockchain and distributed ledger technologies

What is blockchain?

- New type of software – sits on top of the Internet
- Solves some of the problems the Internet has either created or not solved itself
- Adds layer of security, truth and trust to data and transactions on the Internet
- Distributes information to every user on the network that is being created on a blockchain.

Blockchain + Standardization

When is the right time….?

- New technology – too early to standardize?
- Developing standards alongside technology develops trust
- Eases regulators' concerns about whether or not blockchain should be used for either new ways of doing business or for new economies.

ISO TC 307: Blockchain and distributed ledger technologies

ISO TC 307 - Profile

- Created 2016
- Chairmanship and secretariat: Australia
- Countries participating: 41
- Countries observing: 12
- Subgroups: 10
- ISO committees liaising with TC 307: 25
- Organizations in liaison: 8 – including ITU, UNECE

ISO TC 307: Work plan

- Foundations (terminology, reference architecture)
- Security, Privacy and Identity
- Smart Contracts
- Use cases – consistent uses for blockchain networks
- Governance / trust models
- Interoperability

ISO TC 307: Smart contracts

- A way of automating transactions
- Not just in the remittences (payments)
- Automating the promise to deliver something digitally or even physically with proof provided on a blockchain network.

ISO TC 307: Addressing Blockchain Challenges

- Lack of clarity around legal risks and regulatory frameworks
- Privacy and confidentiality
- Reluctance to change established business processes to embrace blockchain
- Immature technology
- Challenges in building business networks

Where do I sign up?

Getting involved

- Shape industries
- Give your company/organization a voice
- Help write the future
- Help build and become part of a worldwide network
- Help to shape best practice

Via your National Standards Body

Questions?

Thank you!