

FinTech Innovation Hub Report (2nd Edition)

July 2021

Financial Services Agency



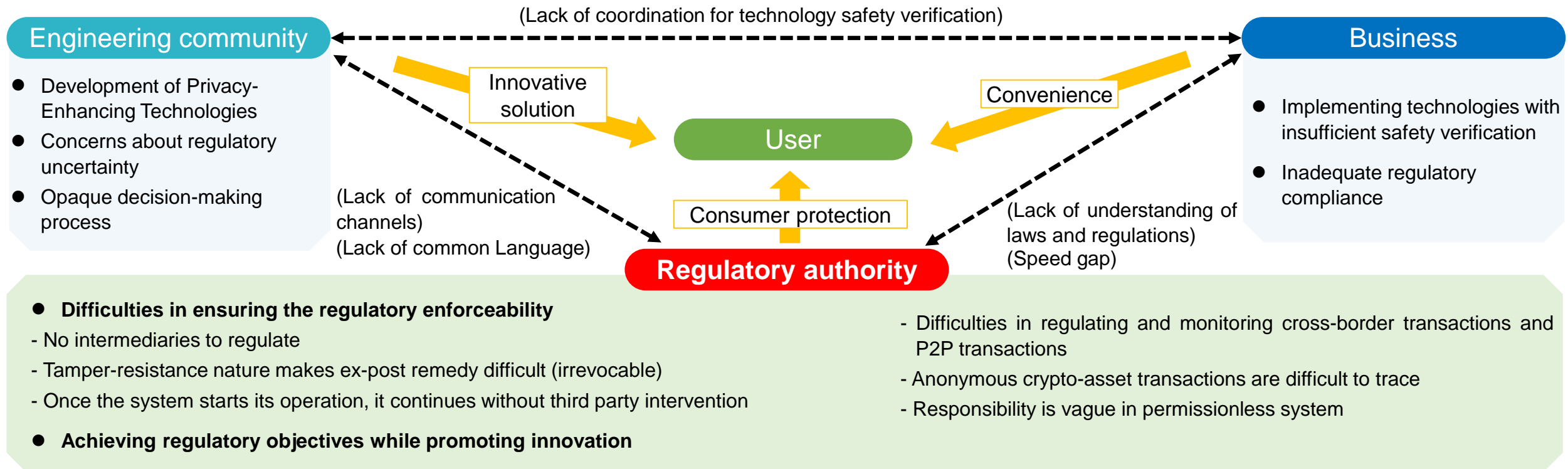
- * This report summarizes the activities of the FinTech Innovation Hub established within the Financial Services Agency in July 2018.
- * The contents of the report are at the time of the activity and do not necessarily reflect subsequent updates.
- * The Financial Services Agency does not endorse the use cases introduced in this report.



Progress report: Efforts on Governance Issues in Blockchain-based Decentralized Financial Systems

Problem statement

- It could be difficult to achieve regulatory objectives such as AML/CFT and consumer protection with conventional entity-based regulatory approaches in decentralized financial systems where intermediaries may be unnecessary.
- Learning lessons from the bottom-up style development of the Internet governance as a decentralized network, stakeholders need to deepen mutual understanding and work together to address emerging issues for the sound ecosystem development.



Each stakeholder should recognize their roles and responsibilities and collaborate to achieve both innovation and regulatory goals, without being bound by conventional regulatory approaches

Our journey so far

- In-depth discussion with academia and engineers at the Blockchain Round-Table led to the G20 Osaka Declaration.
- Contribution to the establishment of the Blockchain Governance Initiative Network (BGIN).
- Discussions on various issues in decentralized financial systems with diverse stakeholders from around the world at Blockchain Global Governance Conference (BG2C) and BGIN Block #1-2 general meetings.



2018/6 -
FSA staff dispatch to
Georgetown University

2019/3
3rd Blockchain
Round-Table (Tokyo)

2019/9
FIN/SUM2019 (Tokyo)

2020/3
Blockchain Global Governance
Conference [BG2C] (Tokyo)
Special online panel discussion

2020/11, 2021/3
BGIN 1st and 2nd General
Meetings (@Mumbai, Paris)



June 2019
G20 Finance Ministers and Central
bank Governors Meeting (Fukuoka
and Osaka)

- Multi-stakeholder discussion among
regulator, developer, academia etc.



(Source : Goodway)

G20 High-Level Seminar on Financial Innovation

Murai Jun* (Professor, Keio University), Adam Back (CEO, Blockstream), Brad Carr (Senior Director, Digital Finance, International Institute of Finance), Klaas Knot (President, De Nederlandsche Bank, and Vice Chair, FSB), Matsuo Shin'ichiro (Research Professor, Georgetown University)

- Further dialogues among
wider stakeholders



(Source : Nikkei, Inc.)

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Establishment of BGIN

- Open discussion on key issues
such as balancing privacy with
AML/CFT



2020/8
BG2C, FIN/SUM BB (Tokyo)

- Co-Chair Fireside
Chat on BGIN's
Goals and Roadmap



(Source : GoodWay)





Source : BG2C Official Website <<https://www.BG2C.net/>>

<<BG2C Special Online Panel Discussion>>

**An Open, Global and Multi-Stakeholder Platform for Financial Diversity
-New Genesis-**

- | | |
|---|---|
| • Endo Toshihide, Commissioner, Financial Services Agency | • Mai Santamaría, Head of Financial Advisory Team (SAFD), Department of Finance Ireland |
| • Pinder Wong, Chairman, VeriFi (HongKong) Limited | • Aaron Wright, Clinical Professor of Law, Cardozo Law School; Director of Cardozo Blockchain Project |
| • Matsuo Shin'ichiro, Research Professor, Georgetown University | • Jemima Kelly, Reporter for FT Alphaville, The Financial Times |

* You can watch the discussion from here < https://www.bg2c.net/en_panel_discussion.html >

Outline of keynote speech by Endo Toshihide, Commissioner of the Financial Services Agency

- In a blockchain-based decentralized financial system, current regulatory frameworks will face lapses in regulatory enforceability by losing the ability to trace the dark deals in cyberspace as privacy-enhancing technologies develop.
- In order to attain key regulatory objectives, including consumer protection, financial stability and AML/CFT, and to reap the benefits of innovation, regulators may need proper coordination with stakeholders whom we have not met before. In 2019, the G20 reached a consensus on the importance of enhancing dialogues with various stakeholders such as engineers.
- In this regard, the Internet may pose the most suggestive case since many challenges that stem from the architecture in the decentralized network have been reconciled through collective efforts made by Internet stakeholders.
- In the subsequent session, Internet experts will demonstrate how multiple parties with different perspectives could work together to achieve healthy governance in the community, through which you will be aware of the necessity for a new global network to bring the governance to blockchain.



Source : BG2C Special Online Panel Discussion
Distribution Video
< <https://vimeo.com/395639333> >

BG2C Special Online Panel Discussion [March 10, 2020]



Source : BG2C Special Online Panel Discussion Distribution Video < <https://vimeo.com/395639333> >

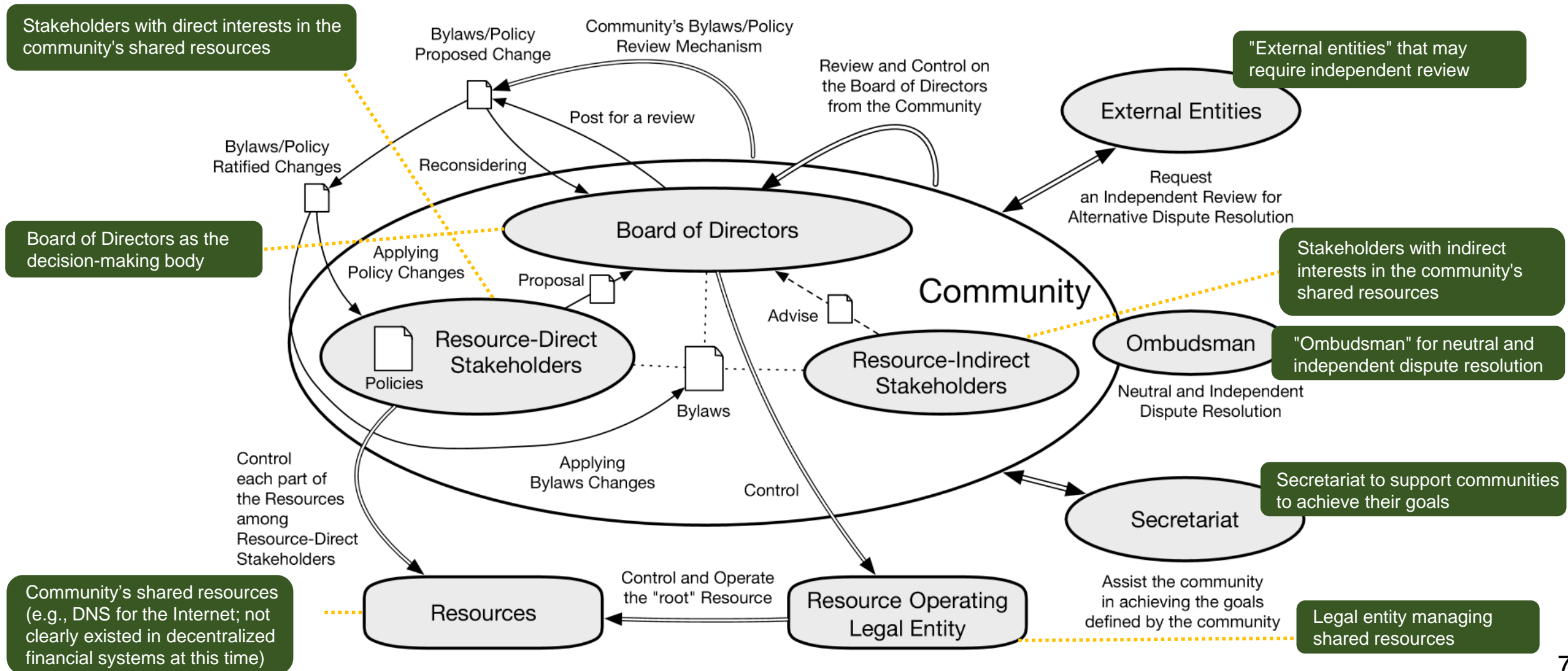
- In a decentralized financial system, it is difficult for the regulatory authorities to address issues with the conventional approach such as prohibition, monitoring, and regulation. In this context, what is required is a new regulation of "cooperation" with stakeholders including those who have not been engaged in dialogue in the past such as the technical community.
- The importance of a bottom-up style multi-stakeholder approach, as well as its difficulties, is shared with other regulatory authorities such as the FSB.
- While it is not clear who will be the intermediaries in the blockchain, what matters for regulators is to **deepen understanding of decentralized financial technology from the current stage**.
- It is indispensable **to establish a global platform** for multi-stakeholder discussions among engineers, researchers and authorities etc.
- **Documentation** is critical factor for the platform. While the technology side does not currently produce clear technical documents, the creation of such documents with the support of academia will ensure that the technology remains transparent to other stakeholders, including regulators.
- Though Blockchain is often referred to as "trustless", it is rather a "new trust." Each stakeholder should share the responsibility and make this ecosystem "trustable".
- As in this session, it is important that **all stakeholders gather in a public forum**. Following the outcome of the discussions at the Expert Group Meeting held yesterday (March 9), we launch **the Blockchain Governance Initiative Network [BGIN]** as a new open and neutral network with 23 initial contributors. BGIN aims to strengthen mutual understandings and to cooperate in addressing various issues in blockchain ecosystem.

2019 Blockchain Multilateral Joint Research (A Study on Governance for Decentralized Finance Systems Using Blockchain Technologies)

- Analyzes the formation process of multi-stakeholder governance (MSG) and how MSG has contributed to solving social issues brought by technologies in cyberspace.
- Present a multi-stakeholder governance architecture that can be applied to a decentralized financial system.

<Simplified model of MSG based on ICANN>

* The full report is available [here](#).



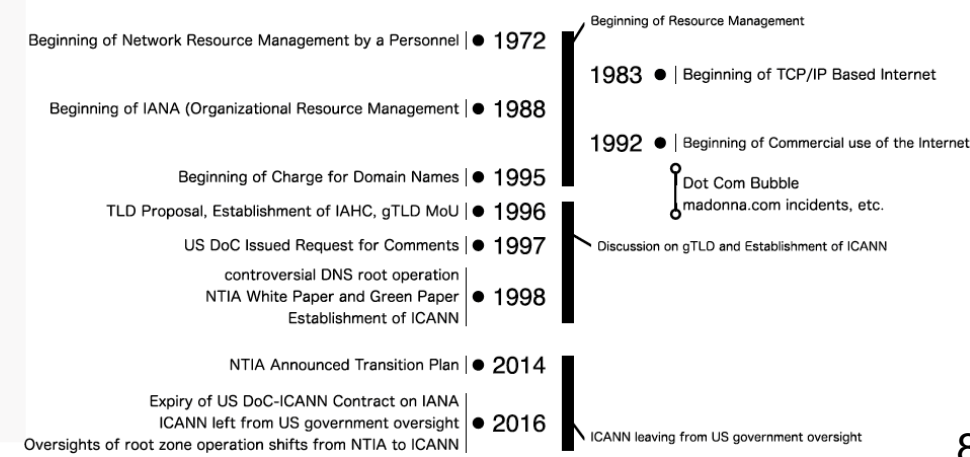
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Insights of Jun Murai, Professor at Keio University (excerpt from interview summary)

- The Internet Engineering Task Force (IETF) was the beginning. We designed it in a way that can be connected by following the standard specifications, but when we actually tried to connect it, it didn't work. This is why interoperability is necessary. **Before the Internet, it was a single telephone company that had operational responsibility, but it has become a model realized by multiple parties.**
- Around 1992, due to the lack of IP addresses and other reasons, next-generation IP networks began to be considered. At that time, there was a debate on whether to use an ISO-based protocol called CLNP or an IP-based protocol. The consensus at the time was “one IP was all that was needed”. **Internet Activity Board, in coordination with the ISO, proposed the choice of the CLNP. However, the IAB faced fierce opposition from the community, became dysfunctional, and reorganized as the Internet Architecture Board.** This was the **beginning of a revolution, so to speak, and the introduction of the multi- stakeholder concept.**
- As the Internet gradually became a big thing, it was barely functioning in terms of intellectual property protection due to assigning names only to “.com” or “.org”. In addition, the country code Top Level Domains (ccTLDs), which are assigned to each country, were being bought up miserably with buying power, and the situation was becoming unhealthy. In other words, the **domain name space was starting to make money.** When this happens, no matter who makes the decision, people will always complain. **“How do we work this out?” became the governance demands on ICANN.**
- **What was particularly important was diversity and making sure that “every community’s voice is heard.”** Most of all, chairman Dyson was amazing. She listened to all the people in the world complaining. She listened to them many times and went around the world three times. When you do something like this, the people who were complaining about it start to give up after about the third time. In the end, that's what gets you through. We let them complain until they ran out of the complaints with “I'm listening to you” stances, and they finally came through, even though nothing on this side had changed. This was a great learning experience. But at least we shared the mission: “We have to do this at ICANN.”
- From the multi-stakeholder perspective, the composition (of ICANN) has been changed a bit since the beginning due to the need of managing legal matters and the growing importance of security. The bottom line is that **ICANN decided on the At-Large, decided on the core operators, and included the governance and route operators into the advisory committee.** Since the domain name was the source of the dispute, the concept of operation was adopted, and the DNS operator was included.
- **There has always been a debate as to whether the governance of the Internet as a global space should be conducted by an UN-type body coordinated by countries.** Internet governance, based on the soundness of current operations that are operating correctly and on rationality as engineering, has been of increasing interest to governments as its impact on society has grown. The prior operation was led by the engineers involved in building and developing it, but another way of looking at it is that it was led by the “Internet developed countries.” It is natural for the “Internet developing countries” to insist on governance at the UN, where the debate is based on fair rights for each country. There was a need for a governance structure that would ensure technical rationality, but also allow countries to participate as stakeholders.

<Timeline of events related to the Internet Multi-stakeholder Governance>



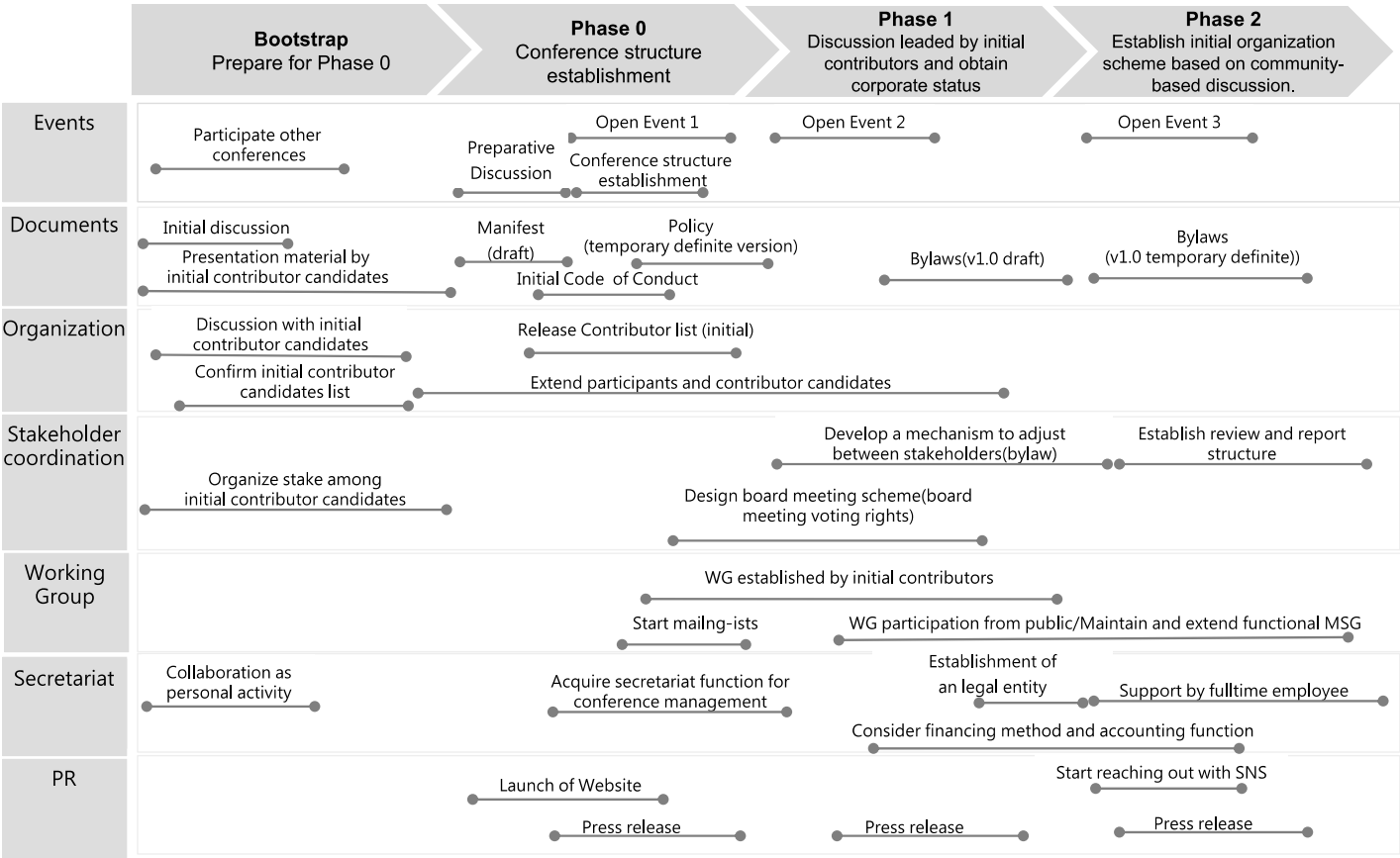
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Main points clarified in this research

- **Governance Mechanisms of a Decentralized Financial System**
 - ✓ Identify the issues posed by decentralized financial systems and the reasons why MSG can be useful in solving them
 - ✓ The overall concept of governance activities and the specific mechanisms which can lead to technological development and solutions to social challenges
 - ✓ Analysis of relationships and comparisons with existing financial system governance structures (e.g., including relationships with various international regulatory standard-setters and national regulators)
 - ✓ Identify stakeholders who need to be involved and design incentives for each stakeholder to participate in governance activities
- **Examples of specific issues to be addressed once the governance activity has started**
 - ✓ The Operation of the Governance of a Decentralized Financial System
 - ✓ Decision-making structure for governance activities (including output and participant selection)
 - ✓ The elements necessary for the core governance organization and functions of the secretariat, as well as funding acquisition methods
 - ✓ Specific analysis and comparison of existing multi-stakeholder governance models
- **Develop a specific schedule for the establishment of the MSG**
- **Anticipated obstacles and challenges to the establishment of MSG**

<Process of MSG's congress formation >



- BG2C [Blockchain Global Governance Conference] was held on August 24 and 25, 2020 as a global conference to discuss governance issues related to decentralized financial technologies with the participation of a wide range of stakeholders.
- The discussions at BG2C reconfirmed the importance of healthy governance mechanism in the decentralized financial system, and in-depth discussions were held on a variety of topics, including security of crypto-asset custody, interoperability among blockchains, Privacy and AML, and human resource development.



[DAY1]

- Opening Remarks (by ASO Taro, Deputy Prime Minister, Minister of Finance and Minister of State for Financial Services)
- Privacy Enhancing and Anti-Money Laundering – dialogues in policy makers and engineers –
- Breakthrough for Safer Custody – Security and Regulation –
- Future Technological Crossroads – Blockchain Interoperability –
- Travel Rule – Toward viable Implementation of FATF Standards –
- CBDC Session – highlighting technical aspects for CBDC viability –
- Evolution of Digital Inclusion – Blockchain and Emerging Market –
- Unconference for multi-stakeholder discussion 1

[DAY2]

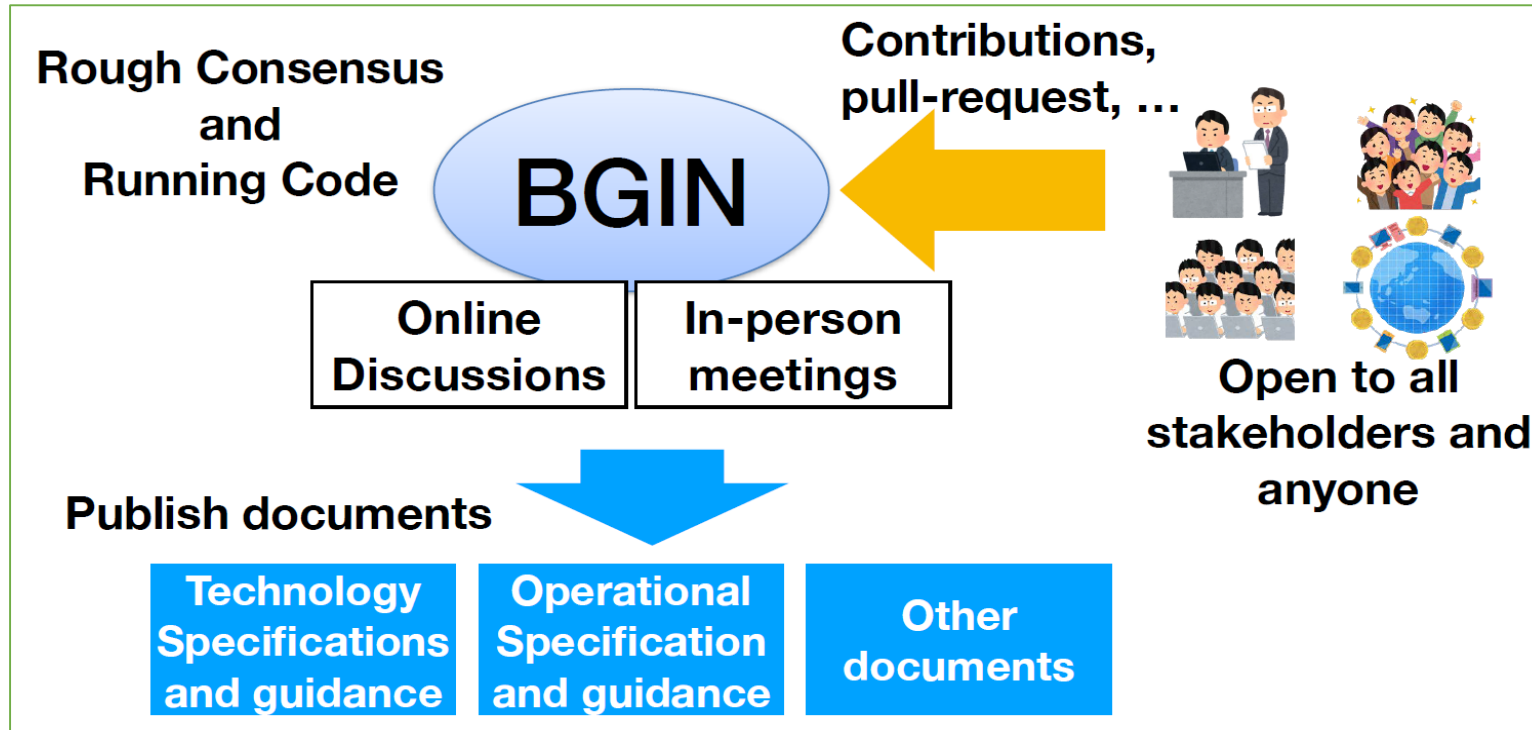
- Bringing the Governance to Codes – Multi-Stakeholder Governance of Decentralized Finance –
- Unconference for multi-stakeholder discussion 2
- Blockchain and Identity
- Ethereum community
- Bitcoin community
- International Joint Research Introduction Session
- Talent Developments – for Sustainable Community Growth in Blockchain –
- BGIN Co-Chair Fireside Chat All aboard the blockchain train: but who are we missing
- Closing remarks (by Himino Ryoza, Commissioner, Financial Services Agency)



* The recording of each session is available on YouTube (<https://www.youtube.com/channel/UCJGSIOyuqZLiBWQajKb8UIA>)

BGIN[Blockchain Governance Initiative Network]

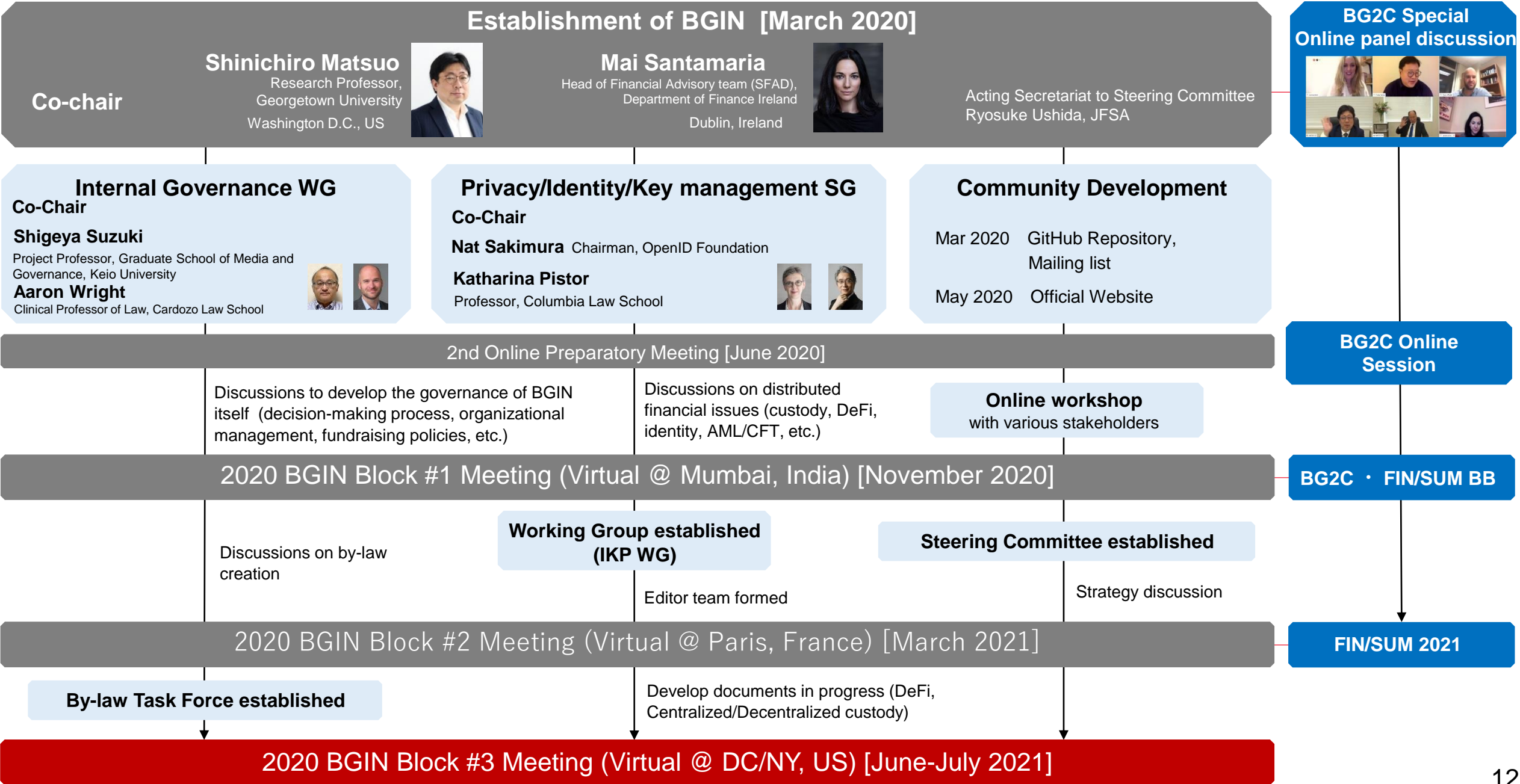
- An open and neutral sphere for all stakeholders to deepen common understanding and to collaborate to address issues they face in order to attain sustainable development of the blockchain community [Established in March 2020].
- A global initiative to achieve sustainable development of the ecosystem that is consistent with the 2019 G20 Osaka Summit Declaration. JFSA made significant contributors by playing critical roles as an initial contributors and acting secretariat to the Steering Committee.



Tentative goals

- Creating an open, global and neutral platform for multi-stakeholder dialogue
- Developing a common language and understandings among stakeholders with diverse perspectives
- Building academic anchors through continuous provision of trustable documents and codes based on open source-style approach

BGIN:Roadmap



1. Efforts to develop the governance of the BGIN itself

- The Internal Governance Working Group (IGWG) that plays a central role in developing multi-stakeholder style governance.
- In Block #1, the BGIN community agreed on tentatively commissioning its intellectual property management and other organizational management to a Japanese legal entity.
- The Steering Committee was established in January 2021 to discuss BGIN's strategy and future direction.
- The the By-law Task Force was established under the Steering Committee in May 2021 based on the resolution that stressed the need for the early creation of preliminary By-law that stipulate critical topics such as fundraising.

<Discussion on governance issues on GitHub>

<input type="checkbox"/>	🔔 11 Open ✓ 1 Closed	Author ▾	Label ▾	Projects ▾	Milestones ▾	Assignee ▾	Sort ▾
<input type="checkbox"/>	🔔 Reminds SGIP to update the ToR and any related documents #12 opened 21 days ago by shigeya						
<input type="checkbox"/>	🔔 Create a way to officially communicate among working groups #11 opened 21 days ago by shigeya						💬 1
<input type="checkbox"/>	🔔 Modifying links affected by GWG-IGWG change at the BGIN's site #10 opened on 27 Apr by shigeya					🌸	
<input type="checkbox"/>	🔔 Renaming mailing list to include "internal" #8 opened on 27 Apr by shigeya					👤	
<input type="checkbox"/>	🔔 Prepare materials to understand GitHub #7 opened on 6 Apr by shigeya					👤👤	💬 4
<input type="checkbox"/>	🔔 Create a document to help organize general meetings #6 opened on 6 Apr by shigeya						
<input type="checkbox"/>	🔔 Create a procedure on general document update #5 opened on 6 Apr by shigeya						
<input type="checkbox"/>	🔔 Reviewing and updating GWG ToR #4 opened on 6 Apr by shigeya					👤	💬 1
<input type="checkbox"/>	🔔 Recommend Steering Committee to create a point of contact #3 opened on 31 Mar by shigeya					👤	💬 1
<input type="checkbox"/>	🔔 Draft a document on the procedure to create Working Group/Task Force #2 opened on 31 Mar by shigeya					👤👤	💬 19
<input type="checkbox"/>	🔔 Implementing Code of Conduct into all of the repositories in the bgin-global project #1 opened on 1 Dec 2020 by shigeya					👤	💬 8

<https://github.com/bgin-global/igwg/issues>

<Discussion at IGWG>

Group 1: On the governance of BGIN itself

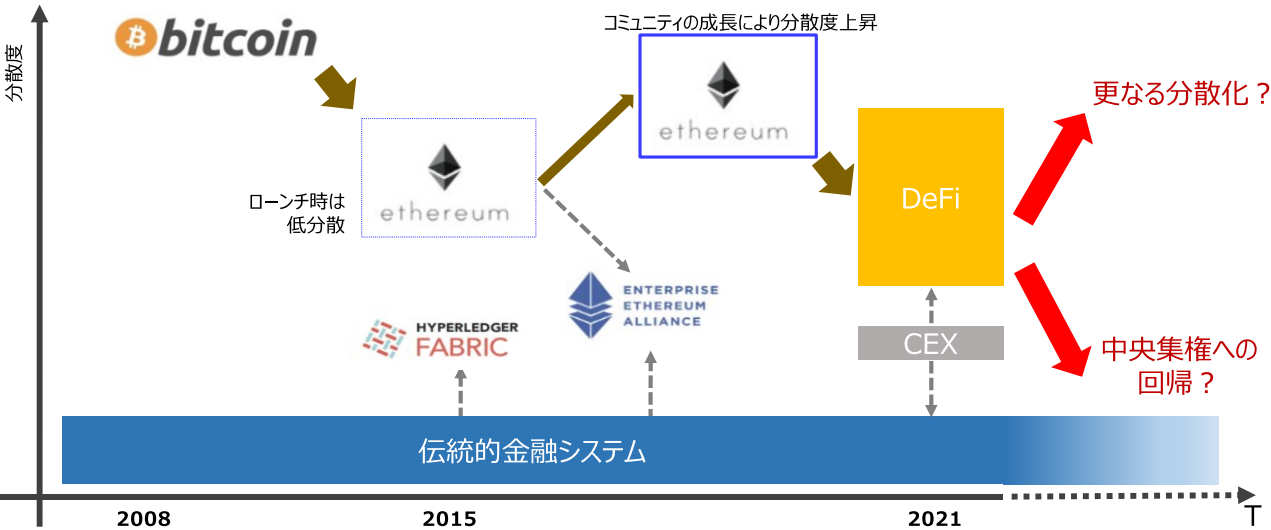


- This group's ultimate purpose is creating ByLaws
- Initially, we'll create multiple documents (for easier maintenance and update) then combined into a single ByLaws
- After creating initial ByLaws, the groups will be disbanded
 - Document maintenance procedures should be described in ByLaws
- We need a new name for the group, to avoid confusion
 - (tentatively use [BLTF] for the reference purpose)

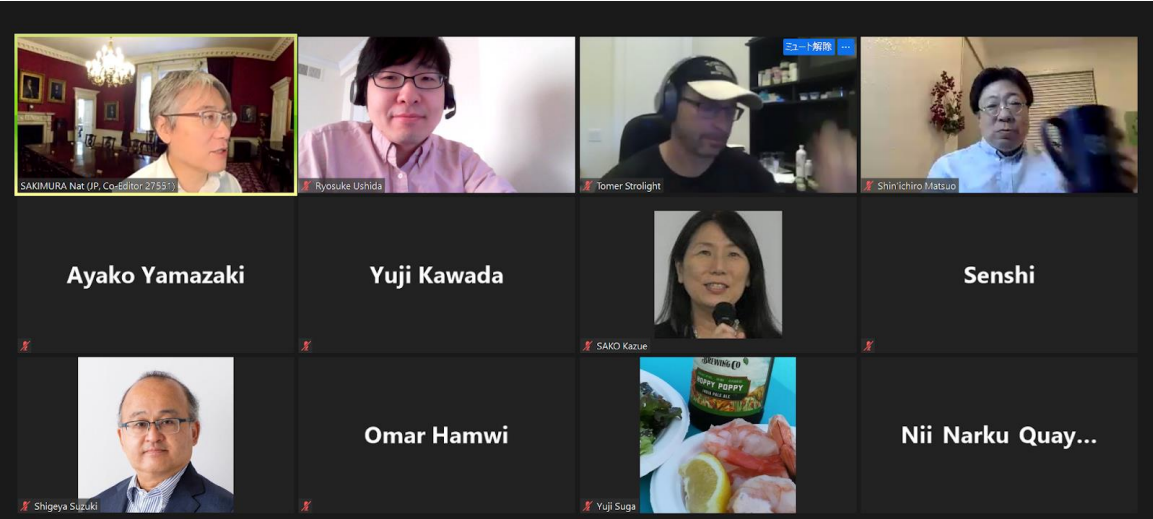
2. Discussion and documentation in progress on key Issues of the Decentralized Financial System at IKP WG

- Identity, Key management, and Privacy Working Group (IKP WG) discusses various issues such as privacy protection, security and regulation at by-weekly calls.
- Invited talks and panel discussions by experts on specific topics and roundtable discussions were held at each general meeting.
 - ✓ Block #1 : Regulatory enforceability of distributed financial systems
 - ✓ Block #2 : Traceability of crypto assets (including DeFi) and AML/CFT (e.g., FATF Travel Rules)
- Document in progress ① : Present and Future of a Decentralized Financial System and the associated Regulatory Considerations
 - ✓ Analysis on key issues of the decentralized financial system that regulators should understand (e.g., trends in the DeFi community, relevant technologies, governance mechanisms, prospects for further decentralization) [[Draft paper](#)]
- Document in progress ②・③ : Key Management of Centralized/Decentralized Custody
 - ✓ Guidelines for key lifecycle management of digital asset custodians (technologies, operations, responsibility, regulatory compliance, etc.) [Draft Paper ②、③]

<Conceptual Diagram about Future Prospects of DeFi>



<Discussion at IKP WG>



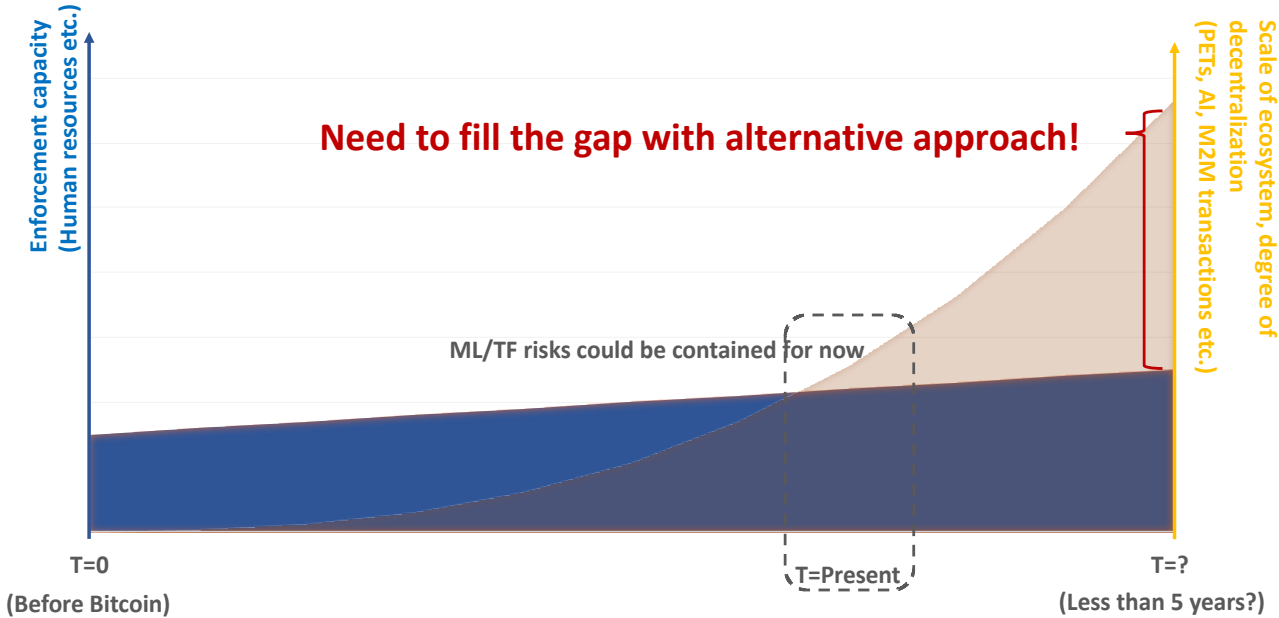
Reference: Contributing to the FATF Discussion

- BGIN expressed its views based on the takeaways from multi-stakeholder discussions at the FATF outreach meeting on the draft updated guidance for a risk-based approach to virtual assets and VASPs (April 2021).
- Present critical issues to achieve regulatory objectives for the present and future (e.g., clarification of the regulatory scope, key management, risk of reduced regulatory enforcement capacity due to expansion of machine-to-machine (P2P/M2M) transactions) rather than criticizing the draft guidance.
- U.S. regulators joined the 3rd meeting (Block #3 @DC/NY) (June 2021)

<Presentation by Co-Chair Prof. Matsuo>



<Conceptual diagram showing increasing gap between enforcement capacities and scale of ecosystem>



* The entire presentation material is available [here](#) (BGIN official website).