

AI Governance in Japan ver. 1.0

INTERIM REPORT

Expert Group on Architecture for AI Principles to be Practiced

January 2021

Information Economy Division, Commerce and Information Policy Bureau
Ministry of Economy Trade and Industry, Japan

- Discuss ideal approaches to **AI governance** in Japan, including regulation, standardization, guidelines, and audits, conducive to the competitiveness of Japanese industry and increased social acceptance, for the purpose of operationalizing the **AI Principles**, taking domestic and international AI trends into account. (The Integrated Innovation Strategy 2020 & the AI Strategy 2019, revised based on follow-ups this year)

AI Principles = Social Principles of Human-centric AI (2019.3)

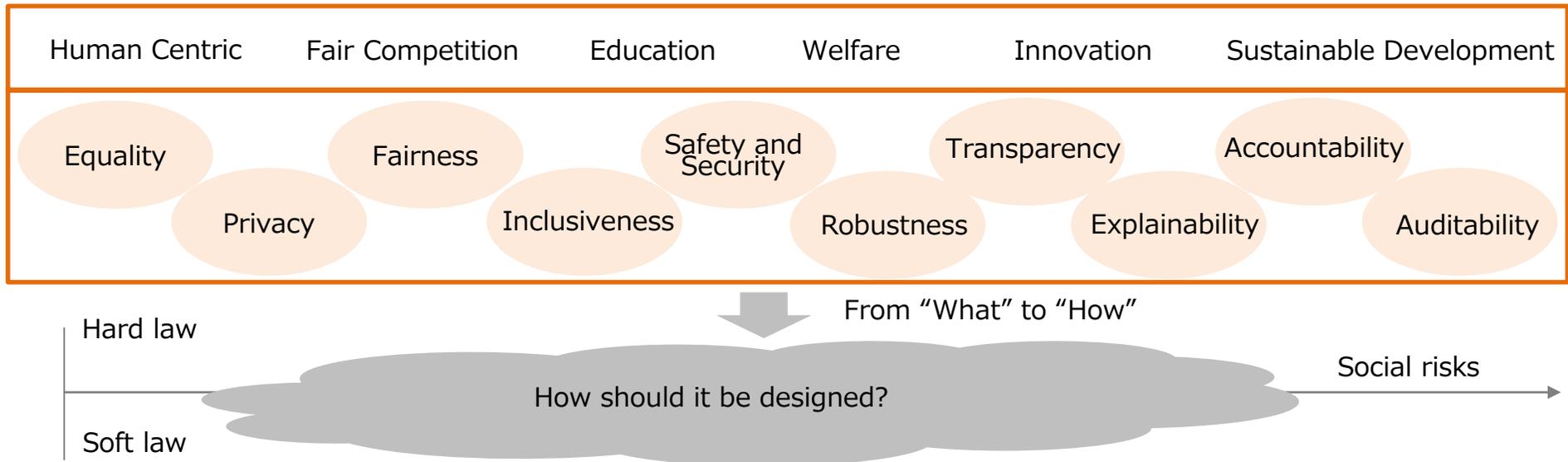
- Basic Philosophy
 - Dignity: A society that has respect for human dignity
 - Diversity & Inclusion: A society where people with diverse backgrounds can pursue their well-being
 - Sustainability: A sustainable society
- Social Principles of Human-Centric AI
 1. Human-Centric, 2. Education/Literacy, 3. Privacy Protection, 4. Ensuring Security, 5. Fair Competition , 6. Fairness, Accountability, and Transparency, and 7. Innovation

AI Governance (definition in the discussion of Expert Group)

- Design and operation of technological, organizational, and social systems by stakeholders for the purpose of managing risks posed by the use of AI at levels acceptable to stakeholders and maximizing their positive impact.

- **A round of discussion on AI principles was almost finished at OECD AI Principles and G20 AI Principles, which plural countries agreed on,** after “Social Principles of Human-centric AI” from was decided in Japan and “The Ethics Guidelines for Trustworthy AI” of High-Level Expert Group on AI in Europe was published.
- As the discussion on what AI principles are is moving toward a general consensus, it is said that **the theme of the discussion is shifting from AI principles to AI governance that operationalizes AI principles in society.**

Examples of AI Principles



- **A risk-based approach* is very much an international common ground.** *Idea that the degree of regulatory intervention should be proportionate to the impact of risks for AI governance.
- Regions and other stakeholders have **not necessarily reached a consensus on the specific risk assessment and classification.**

Risk-based approach

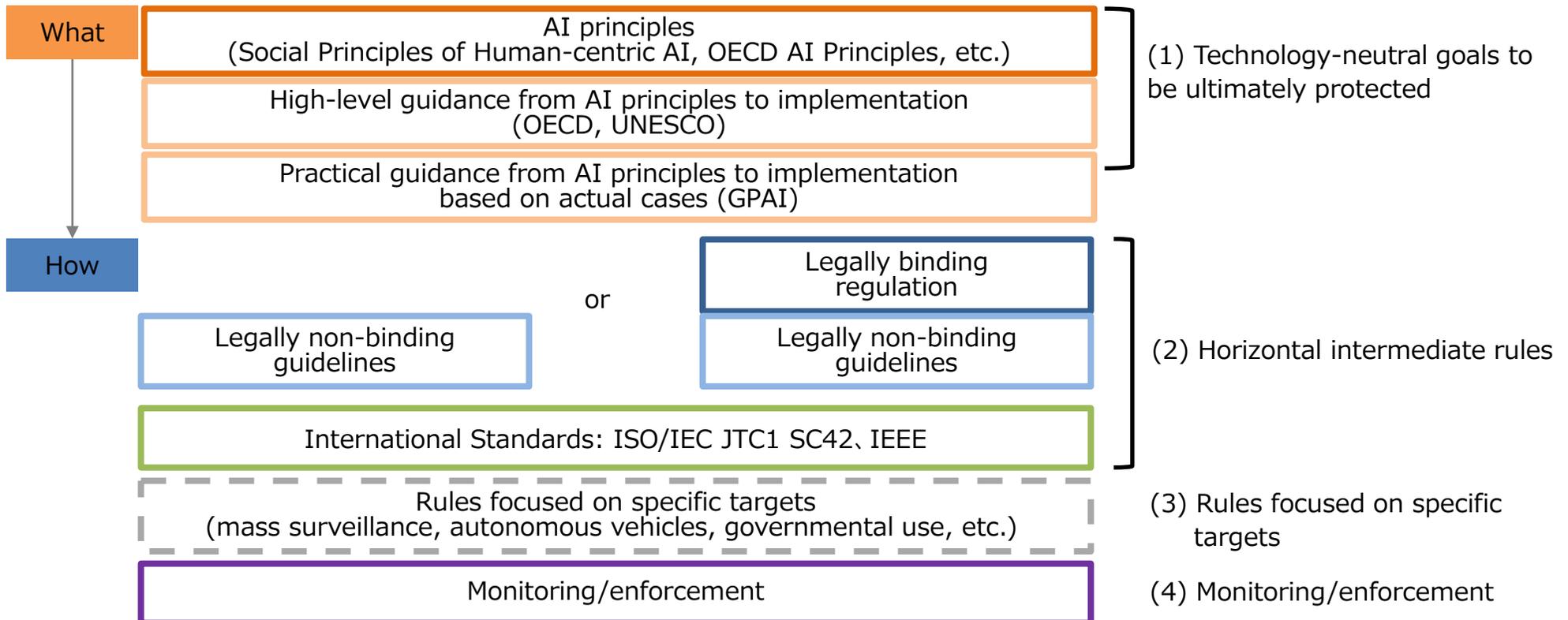
- EU: “[T]he Commission is of the view that it should follow a risk-based approach” because “the new regulatory framework for AI should be effective to achieve its objectives while not being excessively prescriptive.”
- US: When considering regulation, agencies are to take a risk-based approach and determine which risks are acceptable while considering potential benefits, and they think “it is not necessary to mitigate every foreseeable risk” and do not favor prescriptive regulations.
- U.S.-Japan Business Council: “[A]ny efforts by the two governments in this area should be mindful of existing rules and regulations, incorporate risk-based approaches to AI governance ...”

Examples of risk assessment

- The number of risk levels: binary approach and multilevel approach are proposed.
- Idea of classification by usage: risks are classified into the social dimension of risks and the physical dimension of risks, and the former should be addressed by a new regulation.

- This report relies on the universal framework to describe the governance structure in the era of Society 5.0 suggested by the Governance Model Study Group Report* and organizes in layers elements of AI governance.
- International harmonization and alignment between layers are important in AI governance discussion.

*Report "GOVERNANCE INNOVATION: Redesigning Law and Architecture for Society 5.0" (July 13, 2020)



- To address an issue that laws and regulations face difficulties in keeping up with the speed and complexity, it is necessary to change governance models from conventional **rule-based** ones to **goal-based** ones that can guide entities such as companies to the value to be attained. To address an issue of **gap between goals and operations**, it is desirable to set **non-binding intermediate guidelines** and standards which could be referred to by businesses in an effort of achieving the goals set by regulations.*

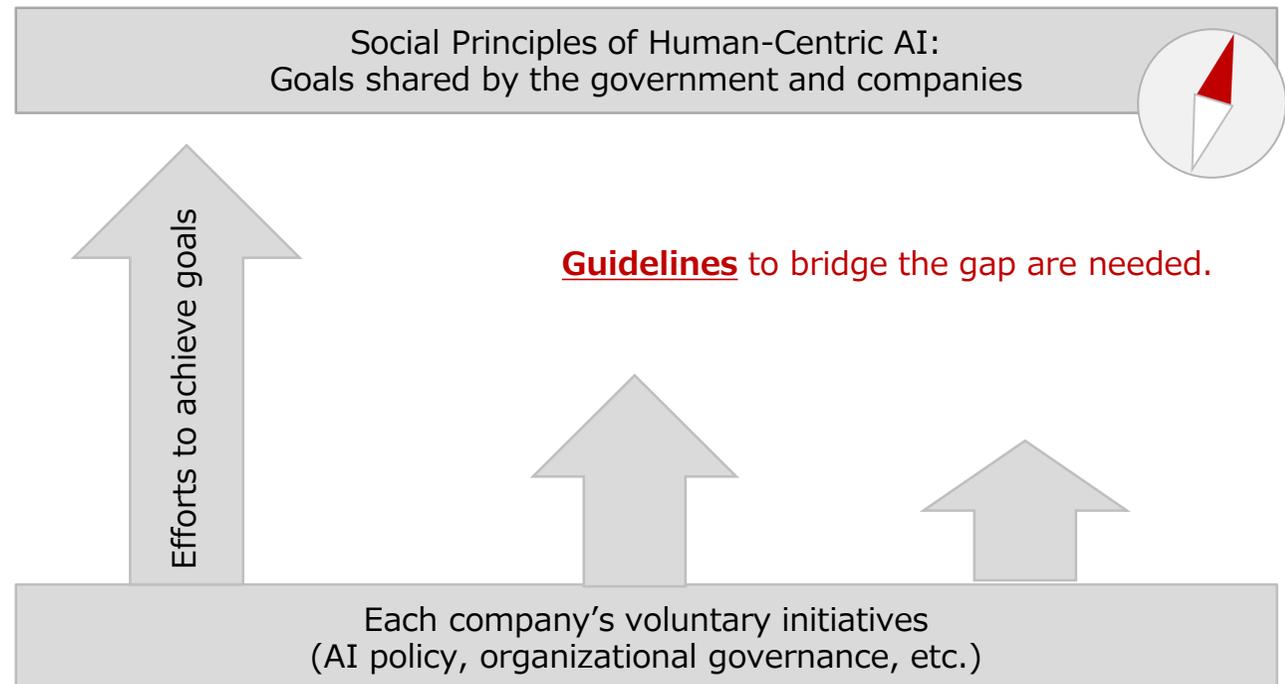
*Report "GOVERNANCE INNOVATION: Redesigning Law and Architecture for Society 5.0" (July 13, 2020)

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- Industry: **Soft law is preferable. Intermediate guidelines are needed** to bridge the gap between AI principles and operation. Hard law should be carefully considered.
- Consumer: **It is desirable for AI to be used smartly by improving customer literacy**. Company's appropriate efforts is expected in this context.

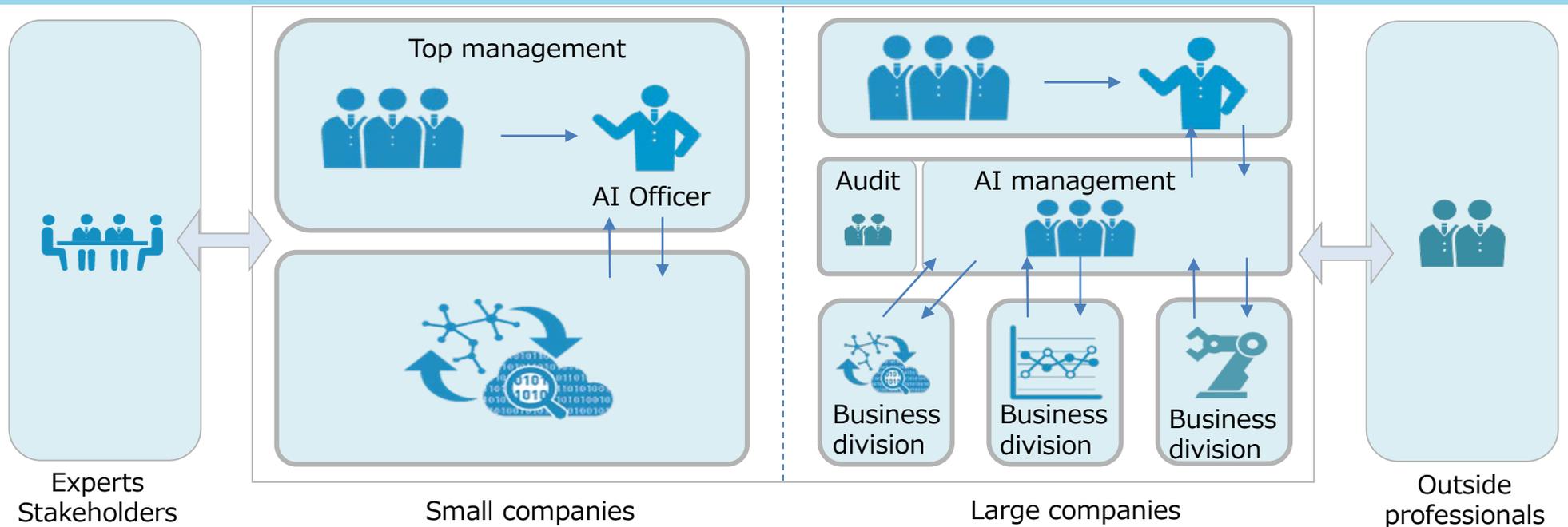
Opinions of industries

- Industries generally agree that some regulation, including soft law, is necessary for AI applications.
- Many industry groups and companies generally agree with soft law.
- Many opine that the scope of regulation should be carefully defined in introducing regulation for high-risk AI applications, although they theoretically agree with the idea of regulation.
- An intermediate guideline is necessary to bridge the gap between AI principles and corporate-level practice. It is better to avoid making the intermediate guideline function as a checklist.
- It is important to build a common understanding between companies. It is rare for the development and operation of an AI system to be completed by a single company. Therefore, companies are required to share views about the process of AI system development and operation.
- It is necessary to pay attention to differences between BtoB and BtoC companies. One-size-fits-all guidance would not be appropriate.

Consumer Perspective

- They may not fully understand AI. They feel insecure about AI.
- Relatively high expectations are placed on areas where wide spread use of services can be easily imagined, such as healthcare/nursing care and automatic translation.

- Make non-binding governance guidelines for companies to support the goal-based governance.
 - They should be based on existing commentary guidelines on AI principles and be designed to be easily incorporated in the corporate governance.
- Keep leading the discussion on international standards.
- Legally binding horizontal regulation is not necessary at the moment.
- In certain areas, it may be better for organizations responsible for industry laws to be involved in regulations rather than to be intervened from the IT side.



- **Ensure incentives to use the non-binding intermediate guidelines**
- Develop guidance on the use of AI by the government
- Harmonization with governance of other countries / coordination between policy making and standardization (for example, GPAI, OECD, UNESCO, EU-Japan AI Joint Committee and discussions with CEN/CENELE)
- Monitoring and enforcement (better to start grasping status of use of the guidelines)

Call for public comments: inputs from multi-stakeholders are necessary. Discussion on AI governance has just started.

by **February 13**

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“To overcome the aforementioned gap between regulation and operation while maintaining the strength of goal-based regulations, which is the ability to keep up with the speed of changes in technology and business models more flexibly, it is important to **establish non-binding guidelines and standards which could be referred to by businesses in an effort of achieving the goals set by regulations**. This will improve the predictability for regulatees, making it easier to achieve the objective of law, especially for small to medium-sized enterprises that have difficulties securing a compliance-related budget on their own.

...

In light of the role of these guidelines and standards, essentially **they should be discussed among a wide range of stakeholders particularly businesses that design/manage the architectures of cyber-physical space, as well as users, engineers, academia, experts in fields of law and audit**, regardless of under whose name these guidelines or standards were provided.” Emphasis added. See 5.1.2.

List of Expert Meeting Members

Report: 5.

Toshiya Watanabe	Professor, The University of Tokyo Institute for Future Initiatives (Chair)
Takenobu Aoshima	General Manager, Data Analysis Department, Digital & AI technology Center, Technology Division, Innovation Promotion Sector, Panasonic Corporation
Shunichi Amemiya	Head of Research and Development Headquarters, NTT DATA Corporation
Naoto Ikegai	Associate Professor, Department of Policy Studies, Faculty of Economics, Toyo University
Katsuya Uenoyama	Representative Director, PKSHA Technology Inc.
Takayoshi Kawakami	Partner/Managing Director, Industrial Growth Platform, Inc. Board Member, Japan Deep Learning Association
Tomokazu Saito	Partner, LAB-01 Law Office
Mihoko Sumida	Professor, Graduate School of Law, Hitotsubashi University
Kenzaburo Tamaru	National Technology Officer, Microsoft Japan Co., Ltd.
Yoshihiro Tsuchiya	General Manager, Commercial Lines Underwriting Dept., Tokio Marine & Nichido Fire Insurance Co., Ltd.
Satoshi Hara	Associate Professor, The Institute of Scientific and Industrial Research, Osaka University
Shinnosuke Fukuoka	Partner, Nishimura & Asahi
Kazuya Miyamura	Partner, PricewaterhouseCoopers Aarata LLC
Tatsuhiko Yamamoto	Professor, Keio University Law School