Eight annual Multi-stakeholder Forum on Science, Technology and Innovation for the Sustainable Development Goals

Thematic Session 3: Think global, act local – people and community led- innovation and tech infrastructures in cities (16:30-18:00 EDT, 3 May 2023) Interactive discussion by Prof. Taikan Oki (3 minutes)

Thank you very much Mr. Moderator, Tālis.

Today I will share some thoughts with you as a chair of science, technology, and innovation 2050 committee (STI2050) of the Engineering Academy of Japan (EAJ).

We published a report "STI Roadmap to Achieve the Sustainable Development Goals; The Road to 2050" by the committee under EAJ a year ago.

In the report, we focused on three issues:

- 1. governance based on visualized evidence and tolerance of diverse values,
- 2. sustainable and equitable access to water, food, and energy, and
- 3. smart cities and comfortable and resilient human settlements.

Personally, I am an expert in water and climate, however, in this session, I will focus on the 3^{rd} issue.

For the 3rd issue, we propose a "Multi-AI Networked City" where the pursuit of well-being is centered on human beings, with the aim of ensuring comfort in normal times and safety and security during outbreaks, not limited to pandemics but including abnormal conditions caused by natural disaster and large-scale accidents.

The "Multi-AI Networked City" would consist of autonomous and independent decentralized living segments that do not destroy current urban structures and would prevent the collapse of the entire city activities under any circumstances, while at the same time guaranteeing human security and well-being.

The "Multi-AI Networked City" would involve a Multi-AI Well-being Survey System (MAWSS), which would allow people and AI to cooperate in the autonomous management of

the city with a variety of data moving freely between networked living areas.

The "Multi-AI Networked City" would differ from conventional urban planning in that it encompasses a process whereby the city is initially multipolarised by multiple cyber living segments, but ultimately forms physical, independent, and autonomous living segments.

The idea is that transforming real world takes time, therefore it will be better to develop an ideal and better cyber world first, and let the physical world catch up the ideal cyber world.

The detailed description can be found in the report "STI Roadmap to Achieve the Sustainable Development Goals" by the Engineering Academy of Japan (EAJ) which you can find on the web.

Thank you very much.

Reference:

https://www.eaj.or.jp/eajlocal/wp-content/uploads/2023/01/eaj-report-sti2050c-2022_e.pdf