

MATRIX OF CYBER SMART CITY CONSORTIUM

Connecting Earth and Space, Digitally. Making Smart Cities a “New Industry”.

Advocating the Smart Nation — supporting the development of smart cities and smart societies

A Future-Creating Organization

AX DX GX IoT **Semiconductors** **SMR** Inter-City Collaboration

Matrix of Cyber Smart City Consortium (MCSCC)

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We advocate the Smart Nation, and support the development of smart cities and smart societies.
An implementation-driven consortium: we build a working model — a “kata” — in local communities, connect cities through inter-city collaboration, and customize solutions to each social challenge.

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— Flagship themes: Semiconductors & SMR

MCSCC’s Urban Layered Design — Five Layers, One Architecture

Edge	Nerves	Brain	Limbs	Space
Sensors, wearables and IoT devices are the entry points of urban data	LPWA and other networks link every corner of the city, including mountains and remote islands	AI data centers — the city’s brain (Cyber Brain) — turn data into decisions	Drones and mobility at work in inspection, logistics and healthcare	Satellite communications and positioning reach where and when the ground cannot

Flagship 1: Semiconductors

The heart that powers the city’s brain. Amid explosive demand for AI semiconductors, we hold Japan’s chokepoints: manufacturing equipment and materials.

Flagship 2: SMR (Small Modular Reactors)

Stable power for the gigawatt-scale demand of AI data centers. Semiconductors and energy, designed as one.

Urban challenges cannot be solved on the ground alone. MCSCC designs the five layers as a single architecture, working to lift smart cities from demonstration to a “new industry.” The implementation model we built in Masuda — starting with education for local government staff — and re-linked in Nagasaki is called the “**Masuda–Nagasaki Model**” (international name: **the KATA Model**). The model now extends to our Asia Hub in Indonesia and EU Hub in Bulgaria, and into collaboration with governments and cities including Vietnam.

Organization

Founded October 29, 2018	**Headquarters** Tokyo Global Headquarters (Nihonbashi-Kayabacho)
Domestic bases 11 campuses across Japan (Masuda, Maniwa, Yashiro, Saijo, Nagasaki, Tatebayashi, Sendai, Toyama, Matsue, Izumo, Omura)	**Overseas campuses** Sanur, Bali / Bandung, West Java / Jakarta Special Region / East Nusa Tenggara (planned)
Scope Active worldwide from Japan — Twin-Hub Strategy: Asia Hub = Indonesia / EU Hub = Bulgaria	
Partnership with Tokyo Registered supporting partner for Indonesia under the Tokyo Metropolitan Government’s Global South GX Promotion Project (MCSCC, AGD and SCO registered)	

Message from the Representative Director



What we began in Masuda was not an experiment in technology. It was writing down, together with local residents, the real problems of a community facing depopulation and aging — and creating the technology those problems required. That is the “Masuda Style.” We do not test technology because it exists; we create technology because a problem exists. That order has never changed.

Today our stage has widened — from Masuda to Nagasaki, and on to Indonesia, Bulgaria and Vietnam — as we take on the implementation of a Smart Nation that connects Earth and space digitally. A smart city is like an orchestra: many players and technologies, harmonized so that citizens are satisfied. MCSCC will remain an organization that does not merely predict the future, but creates it.

Matrix of Cyber Smart City Consortium
Representative Director **Yoshihisa Toyosaki**

Track Record — From the Masuda Smart City Era to Today

2016 Smart city project launched in Masuda, Shimane (the origin of the “Masuda Model”)

2016-19 Before forming any project, 11 IoT education seminars were held free of charge for Masuda City staff and local companies (all city staff attended; this local-government education — aiming for “Japan’s most IoT-literate administration” — is the foundation of the Masuda Model)

2018 Comprehensive partnership agreement signed with Masuda City for the IoT testbed program

2019 Selected by MLIT as one of the 15 Leading Model Districts for smart cities (adopted three consecutive years, 2019–2021). Lecture at the National Municipal Exchange Symposium of Kyoto Smart City Expo 2019

2019-20 MLIT Smart City Demonstration Survey (FY2019 supplementary / FY2020, Masuda): demonstrations of watch-over services, IoT infrastructure, road and electric-fence monitoring

2021 METI feasibility study adopted: Bali Smart Mobility Infrastructure Development Survey (four-party consortium, MCSCC as overall coordinator; MOU with YPS in 2022). Lecture at Nagasaki Prefecture’s Society 5.0 awareness seminar (about 200 prefectural and municipal staff). Special lecture at Super City / Smart City OSAKA 2021. Featured and interviewed in Nikkei and Nikkei Business

2022 Selected for the Cabinet Secretariat’s “Digi-den Koshien” under the Digital Garden City Nation initiative. Keynote at Saitama Prefecture’s kickoff symposium for the initiative

2023 Adopted by the Agency for Natural Resources and Energy (FY2022): feasibility study on sector coupling of waste-to-energy and EV buses in Jakarta

2024 First MCSCC–Nagasaki Prefecture–Nagasaki City Joint Digital DX Study Session held at the Nagasaki Prefectural Office

2025 Cabinet Office survey on advanced service development and regulatory reform: drone-based infrastructure inspection efficiency study (Nomozaki, Nagasaki City; road inspection over public roads demonstrated under quasi-Level 3.5 conditions)

2026 Supporting partner for Indonesia under Tokyo’s Global South GX Promotion Project (MCSCC, AGD and other member companies); supported member company JOYCLE’s adoption and advancing its GX technology feasibility study in Rebana

2025-26 MOU with West Java’s Rebana Metropolitan (2025) and Phase-2 MOU (2026). MOU with Bandung Institute of Technology (ITB) and a three-party MOU with BRIN (2026). In Bulgaria, at the Deputy Prime Minister’s invitation, international meetings with Prime Minister Radev and others, proposing a policy white paper (2026). Support program for the Nagasaki Prefectural Assembly’s Indonesia study missions (1st in 2024, 2nd in 2026, jointly planned with the Assembly). The Representative Director became a Senior Fellow of Citieslab Nusantara, a Jakarta-based non-profit think tank (2026)

Ongoing Symposiums, forums and seminars held continuously in Masuda and Tokyo: the large-scale symposiums of the “Nippon High-Tech Regrowth Association” (the 8th co-hosted as MCSCC’s founding symposium) and the Digital Garden City Forums (1st in Masuda, 2nd in Shinagawa, 3rd and 4th in Nagasaki). Lectures at the 1st and 2nd ASEAN–Japan Smart Cities Network High-Level Meetings; invited exhibitor at the 6th (2024), where an MOU with Indonesia’s Ministry of Home Affairs was agreed under MLIT coordination. Planned and hosted the SDGs international meeting in Jakarta, and co-hosted the Indonesia Economy, Industry and Human Resources Symposium with Nagasaki Prefecture (2026)

Officers, Advisers & Secretariat

Representative Director Yoshihisa Toyosaki
Directors Tsuyoshi Hashimoto / Takayuki Nemoto / Kenichi Suematsu / Masayuki Susai
Special Advisers Seiki Soramoto (Energy; Vietnam & Bulgaria) / Yoichi Kaneko (Economic & financial policy) / Bernardus Djonoputro (Indonesian urban planning)
Permanent Honorary Adviser Yoshikuni Kamichika (ESG philosophy)
Auditor Hiroshi Sakurai (Nuclear reactor seismic design)
Secretary General Takako Koide
Advisers Ahmed Uddin Ashir (Emerging-market healthcare) / Takashi Arakawa (Agriculture) / Masayuki Araki (Earthquakes & disaster mitigation) / Tomohisa Ishikawa (Cancer treatment & personalized medicine) / Atsushi Iwamae (Smart homes) / Luo Yin (Smart construction, China) / Eko Fajar Nurprasetyo (Indonesian semiconductor market) / Masami Osaki (Wireless) / Yukio Ohsawa (AI) / Jun Kamiya (Digital content) / Yuji Kuwabara (Disaster prevention & drones) / Masaaki Kobayashi (Global & urban environment) / Hiroaki Kobayashi (Quantum computing) / Kanami Saito (Sports IoT) / Toshiaki Saito (Community dentistry) / Shigeru Shiina (AI & blockchain) / Kayoko Shimizu (Home-visit nursing) / Kazunori Sugiura (IoT content) / Koji Sugiyama (Data distribution) / Hirokazu Somemiya (Drone air traffic control) / Naomi Tomita (Drones & eco-society) / Yukiko Nakagawa (Regional revitalization & Japan–China innovation) / Hitoshi Nakamura (Storage batteries) / Kazuhisa Hamaguchi (Disaster prevention, mitigation & awareness) / Akihiro Hayashi (GIS & GeoAI) / Liping Feng (Chinese smart city standards) / Yuji Matsumoto (Community healthcare) / Hiroaki Yamamoto (Local government)

Media & Academic Outreach

Commentary published in Weekly Economist and Nikkei’s “Keizai Kyoshitsu.” Covered by Nikkei Glocal, Nikkei Construction, NHK and NBC. Three presentations at the Japan Society of Civil Engineers and a keynote at the Institute of Electronics, Information and Communication Engineers. Masuda’s disaster-prevention IoT was presented as an advanced case at the House of Representatives’ Special Committee on Disaster Countermeasures. Updates are published in MCSCC SCORE.

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