NL

COMMON GROUND
コモングラウンド

Netherlands オランダ

Break-out session High Tech and Digitalization (HTDX)

17-06-2024

THE NETHERLANDS オランダ

Agenda

0. Opening
1. The Netherlands and Japan as Innovation Partners
2. Sub-track High Tech (HT)
3. Sub-track Digitalization (DX)
4. HTDX-track Program
5. Q&A
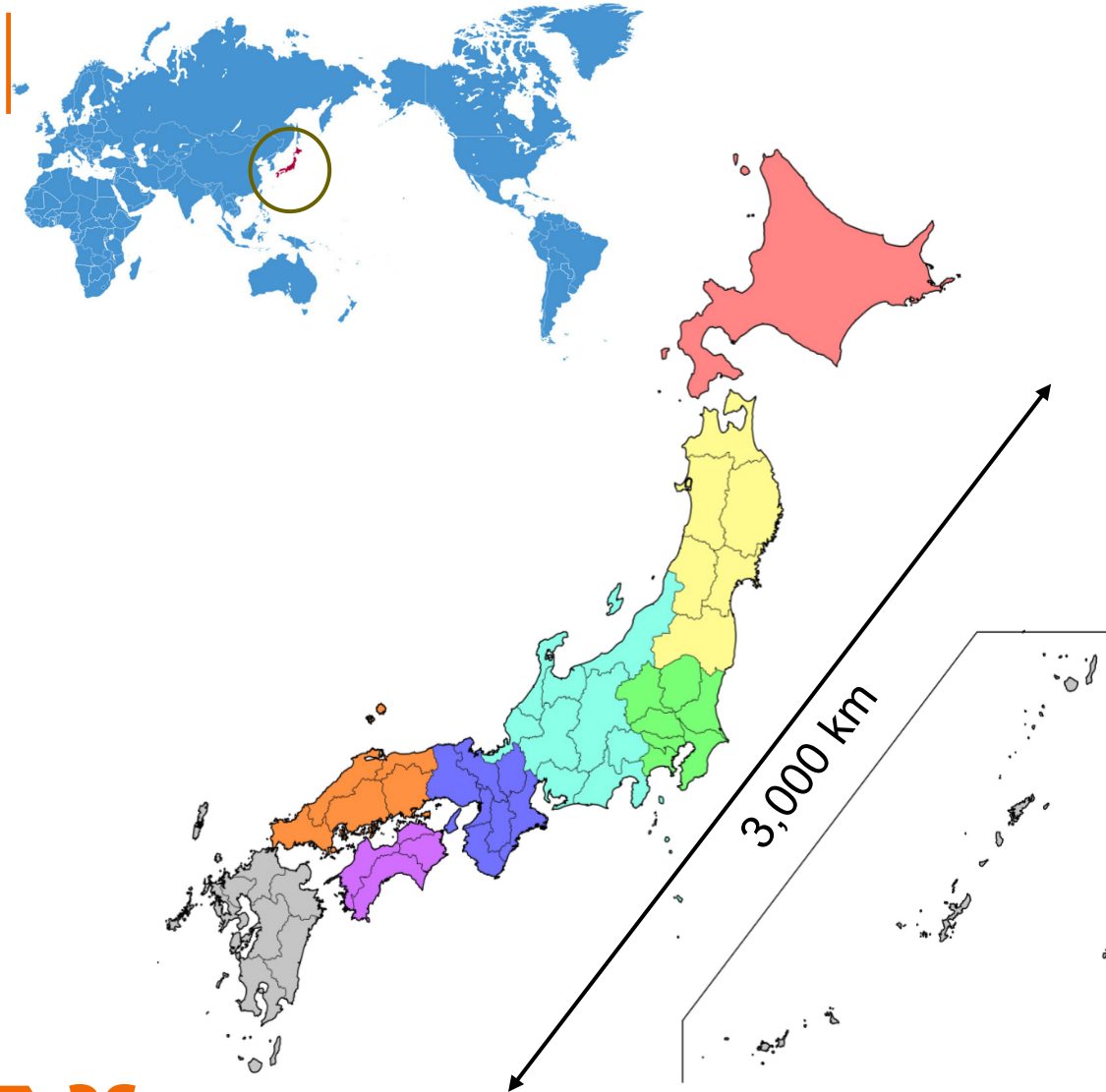6. Closing
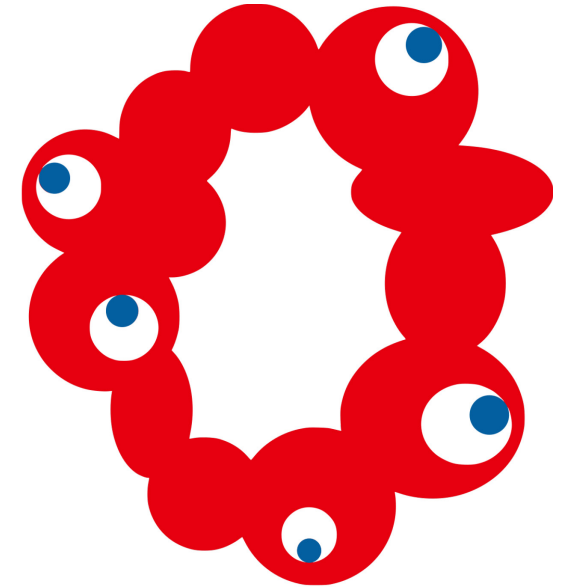
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OSAKA, KANSAI, JAPAN
EXPO
2025

Japan – Country &

- Population (2022): 124 million (18 mln)
- GDP (2022): $ 5 trillion ($ 1 tln)

- Exports (2022): 22% of GDP (94%)
- Imports (2022): 25% of GDP (83%)

- Agriculture: 1% of GDP (2%)
- Industry: 29% of GDP (19%)
- Services: 70% of GDP (79%)

- R&D: 3.5% of GDP (2.3%)
- R&D: 25% government, 75% business

Exports		FDI stock out	
China	- 19.3 %	USA	- 27.0 %
USA	- 18.7 %	Singapore	- 15.3 %
South Korea	- 7.2 %	France	- 13.2 %
Taiwan	- 7.0 %	NL	- 9.0 %
NL	- 2.5 %	China	- 6.5 %

3,000 km

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Japan – Technology Powerhouse
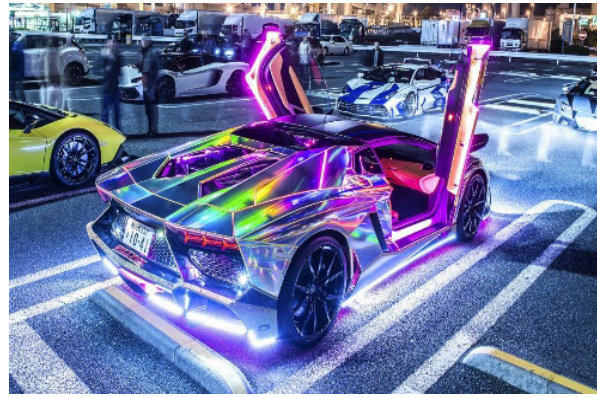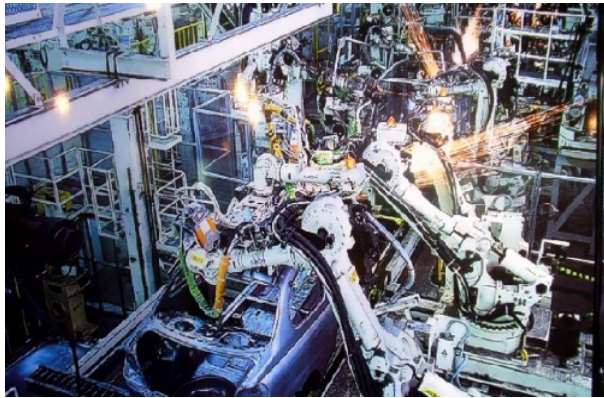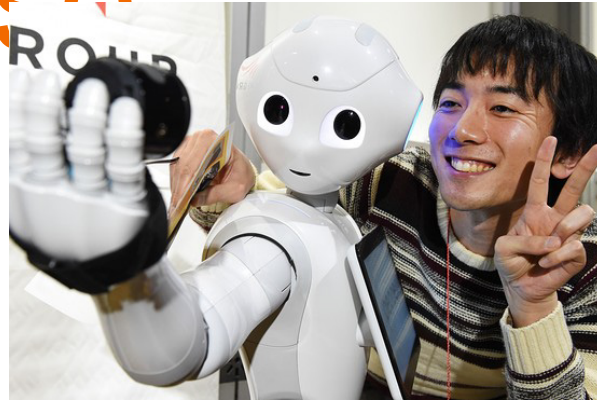
Japan – Vision for the Future

Green - Digital - Security

Society 5.0
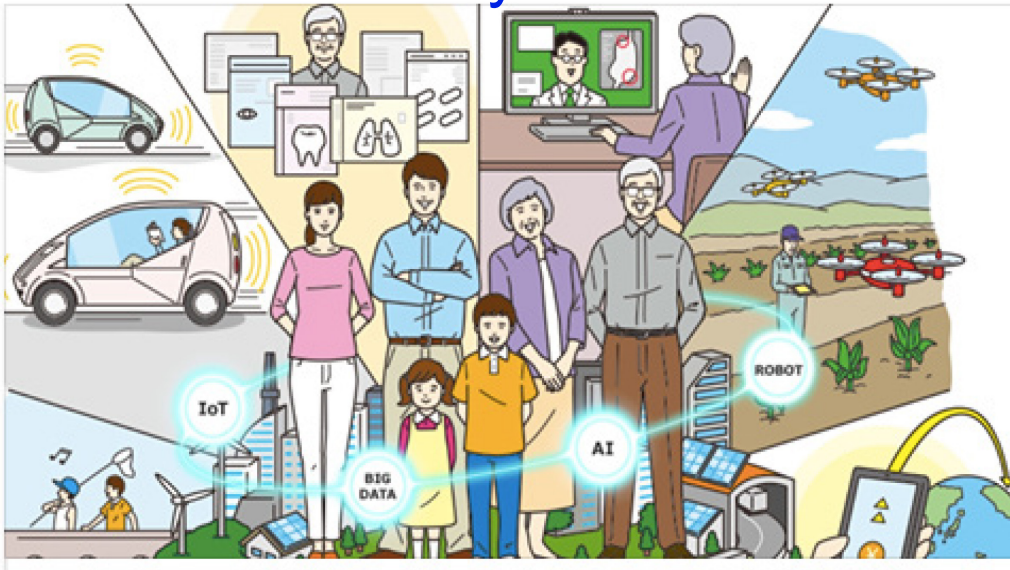
Priority areas for government
- Sustainability
- Digital transition
- Security & resilience

Society 5.0
- Integration cyber & physical space
- IoT, big data, AI, 6G are prominent
- Promotion of economic growth
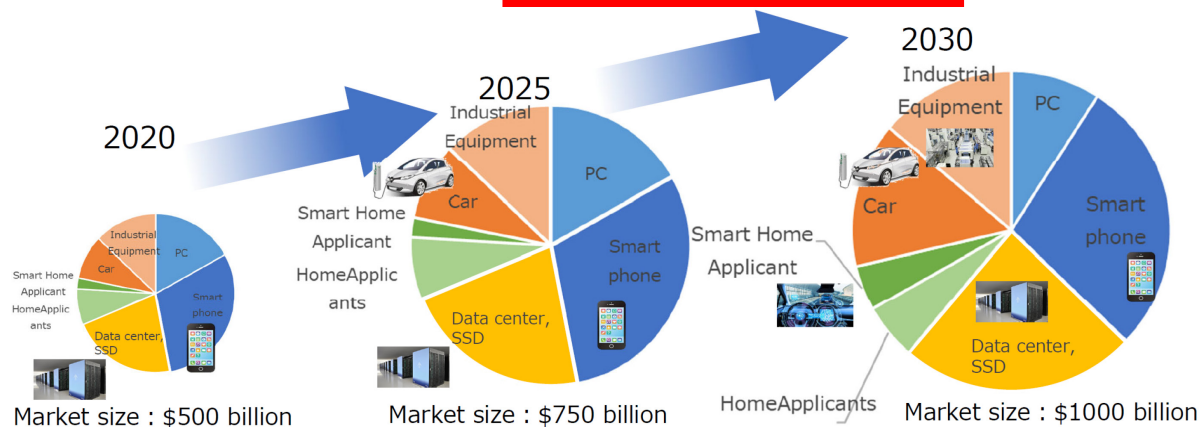- Resolution for societal challenges

Areas of focus
- Semiconductors
- Quantum - Photonics - Nano
- IoT - Big Data - AI - 6G -

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Japan – Innovate for Security & Society 5.0

Basic Semiconductor Revitalization Strategy in Japan

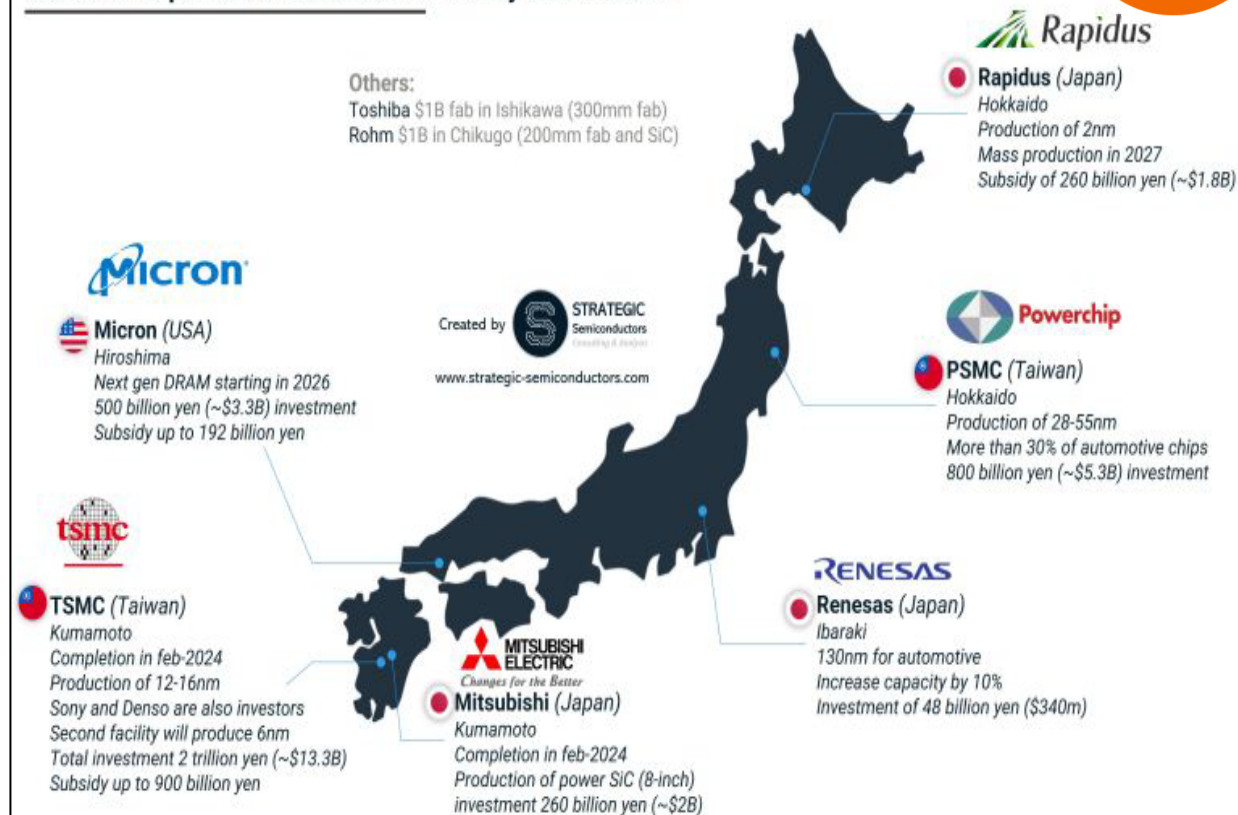**Step 1 : Enhancement of Basic Production Capacity for IoT**

2020 → 2025 → 2030

2020
Industrial Equipment, Car, PC, Smart phone, Smart Home Applicant HomeApplicants, Data center, SSD

Market size : $500 billion

2025
Industrial Equipment, Car, PC, Smart phone, Smart Home Applicant HomeApplicants, Data center, SSD

Market size : $750 billion

2030
Industrial Equipment, PC, Smart phone, Car, Smart Home Applicant, Data center, SSD, HomeApplicants

Market size : $1000 billion

Step 2 : Realization of Next Gene Semiconductor Technology through US – JP Collaboration

Step 3 : R&D For Future technology
Photonics-Electronics Convergence, Quantum Computing through Global Collaboration

(Reference) : prepared by METI, based on data from OMDIA

Status of Japanese semiconductor factory construction

Others:
Toshiba $1B fab in Ishikawa (300mm fab)
Rohm $1B in Chikugo (200mm fab and SiC)

Created by STRATEGIC Semiconductors
www.strategic-semiconductors.com

Rapidus
Rapidus (Japan)
Hokkaido
Production of 2nm
Mass production in 2027
Subsidy of 260 billion yen (~$1.8B)

Micron
Micron (USA)
Hiroshima
Next gen DRAM starting in 2026
500 billion yen (~$3.3B) investment
Subsidy up to 192 billion yen

Powerchip
PSMC (Taiwan)
Hokkaido
Production of 28-55nm
More than 30% of automotive chips
800 billion yen (~$5.3B) investment

tsmc
TSMC (Taiwan)
Kumamoto
Completion in feb-2024
Production of 12-16nm
Sony and Denso are also investors
Second facility will produce 6nm
Total investment 2 trillion yen (~$13.3B)
Subsidy up to 900 billion yen

MITSUBISHI ELECTRIC Changes for the Better
Mitsubishi (Japan)
Kumamoto
Completion in feb-2024
Production of power SiC (8-inch)
investment 260 billion yen (~$2B)

RENESAS
Renesas (Japan)
Ibaraki
130nm for automotive
Increase capacity by 10%
Investment of 48 billion yen ($340m)

Applications
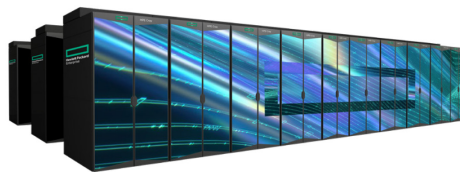
Quantum **AI** **Datacenters** **6G** **Drones** **Robotics**
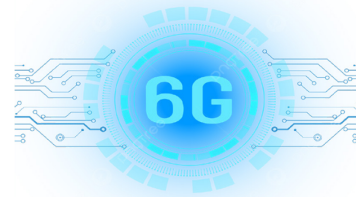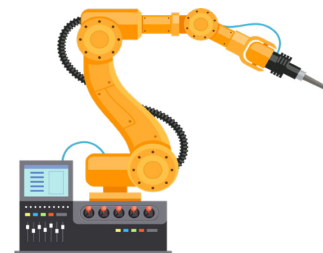
Japan & Netherlands – Economic relations

€ 8.8 bn

€ 7.8 bn
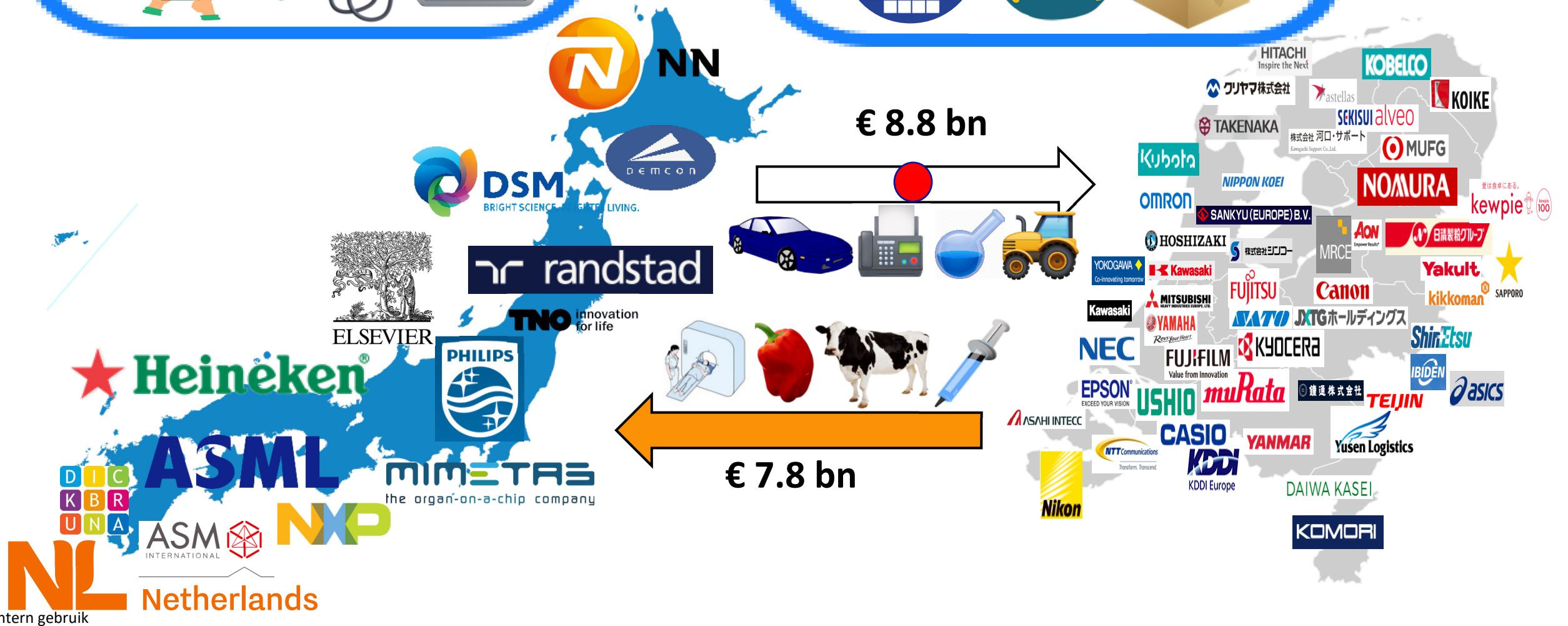
Japan - Economic Cluster – Focus Area's

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Agrifood

FoodTech

Smart Horti

Biodiversity
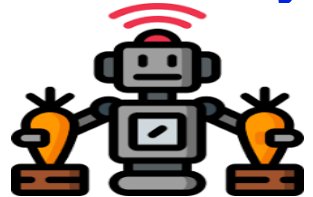
Smart Farming

Health
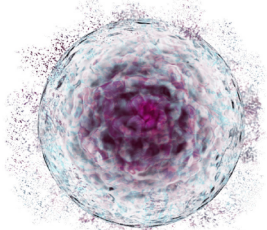
RegMed

AI for Health
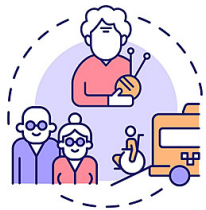
Healthy Ageing

MedDevices

Energy

Hydrogen

Offshore Wind

Batteries

Geothermy

Circularity

HTDX

Semicon

Quantum
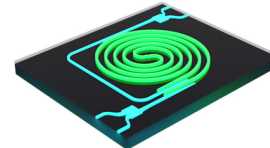
Photonics
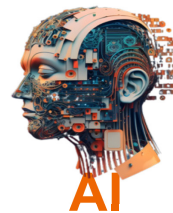
AI
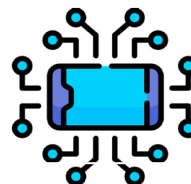
Digitalization

Security

Geopolitics

Export Control

Supply Chains

Industry Policy

Others

Space

Automotive

Gaming

Design

Japan & NL - Hightech & Digitalization
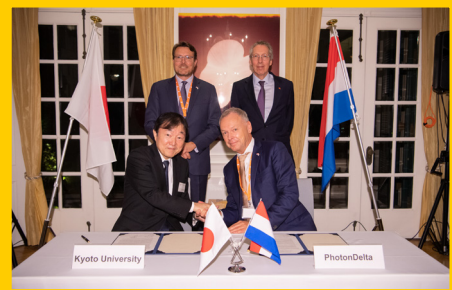
Objective
- Consolidate technological leadership JP & NL
- Set-up strategic partnership JP & NL
- Public-private cluster cooperation

Activities
- Each year Semicon Japan & Nanotech Japan Expo's
- 2022 Innovation mission Quantum & Photonics
- 2023 Innovation mission Semicon
- 2023 Study tour Future of Telecommunications (SH)
- 2024 JP deeptech mission to NL
- 2024 Innovation mission AI for Health
- 2024 HTDX core team – Road2Osaka
- 2025 Osaka Expo HTDX track

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HTDX — Semicon, Photonica, Quantum, AI & Data, 6G & XG
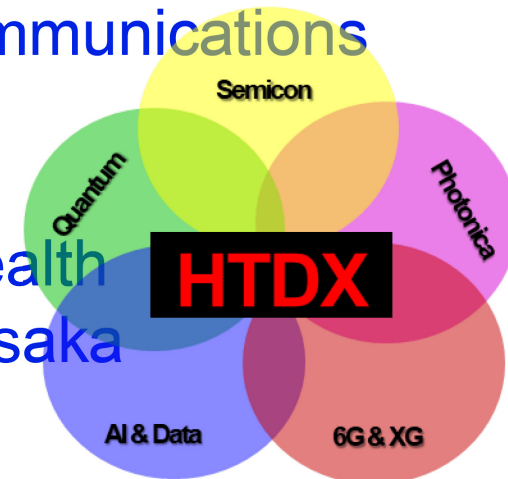
JP-NL – HISTORY WITH A FUTURE

Osaka World Expo 2025

THE NETHERLANDS オランダ

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NL in JP since 1600

日本

JAPAN

POWERED BY

COOPERATION

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SCIENCE, TECHNOLGY

INNOVATION

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Sub-track High Tech Semicon, Quantum and Photonics

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Naomie Verstraeten

Chief Innovation & Technology
Brainport Development

Netherlands

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Deeptech Japan

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Innovation mission 2023

Pre-PPP Deeptech 2024

PPP Program 2024/2025

Expo 2025 Osaka

PPP Program 2025/2026

BRAINPORT EINDHOVEN

Kingdom of the Netherlands

BOM Catalyzing Change

High Tech NL
Share innovation. Shape tomorrow.

oost nl

Ministerie van Economische Zaken en Klimaat

Quantum Delta NL

PhotonDelta

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Partners

Dutch & Japanese Deeptech Industry (2021)
Simplified value-chain and revenue estimates

$10.1B+

Dutch value-chain

IC Design	$500M
FPGA, ASIC, ASPIC, PMIC, SoC, MEMS, Lab-on-Chip, sensor interfacing.	

Front-End	$750M
Silicon Photonics MEMS SiGe	

Back-End	$200M
Wafer inspection, IC inspection, dicing, packaging, advanced packaging & 3D stacking, OSAT, EMS, micro-assembly (RF, PIC)	

Applications	$600M
SoC, MEMS, RFIC, NFC, LiDar, PMIC, optical sensors, antenna, amplifiers, phase shifters, photonic sensors, quantum modules diagnostics, Smart SFP, RFIC, wireless devices, optical data transmission, etc.	

EDA Tools	$55M
EDA, IP core design, FPGA architecture, embedded software, design tools.	

Materials	$200M
Wafers, coatings, gasses, metal powder assembly materials	

Equipment	$13.7B
• Lithography • Deposition (ALD, CVD) • Etching • Packaging • Metrology & Inspection	

Equipment components	$3.1B
• Power subsystems • Optical subsystems • Controller subsystems • Vacuum subsystems • Handling subsystems	

Japanese value-chain

Design & Front-End	
MEMS, DRAM IGBT, MOSFET, CMOS, SAW filter, JFET, bipolar, LEDs, NAND, Silicon photonics	

Back-End	
Wafer inspection, IC inspection, dicing, packaging, advanced packaging & 3D stacking, OSAT, EMS, micro-assembly (RF, PIC)	

Applications	$47B
Microprocessors, microcontrollers, digitial signal processors, SoC, MEMS, RFIC, NFC, LiDar, PMIC, optical sensors, antenna, amplifiers, phase shifters, photonic sensors, quantum modules, diagnostics, Smart SFP, RFIC, wireless devices, optical data transmission, etc.	

Materials	$9.0B+
Silicon wafers	$6.7B
Pellicle	$1.1B
Gasses	
CMP slurry	
Target material	
Lead frame	
Bonding wire	

Equipment & components	$18.3B
Front-End	
• CVD/ALD	$6.0B
• Etching	$5.6B
• Stepper	$1.1B
• Mask/reticle inspection	$345M
Back-End	
• IC tester	$2.6B
• Dicing	$1.1B
• Wafer prober	$1.1B
• IC handler	$236M
• Wire bonding	$105M
• Die/chip bonding	$60M

Netherlands: $18.9B+

Japan: $84.4B+

Source: Brainport Development BI, OMDIA, RVO, Statista

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Strengths

- Significant anchoring within the global semicon value-chain through equipment manufacturers & their intertwined suppliers for lithography equipment, metrology equipment, coating equipment and packaging equipment
- Emerging Photonics Ecosystem (InP & SiN)
- Strong research and open innovation ecosystem
- Analog / mixed signal design expertise
- RF circuit design & manufacturing

Weaknesses

- Few (large) foundries
- Material dependant
- Minimal packaging and testing activity
- No EDA tools
- Relative low public & VC investment in deeptech industry compared to other countries
- Limited access to application markets
- National talent shortage
- Less academia compared to neighbouring countries
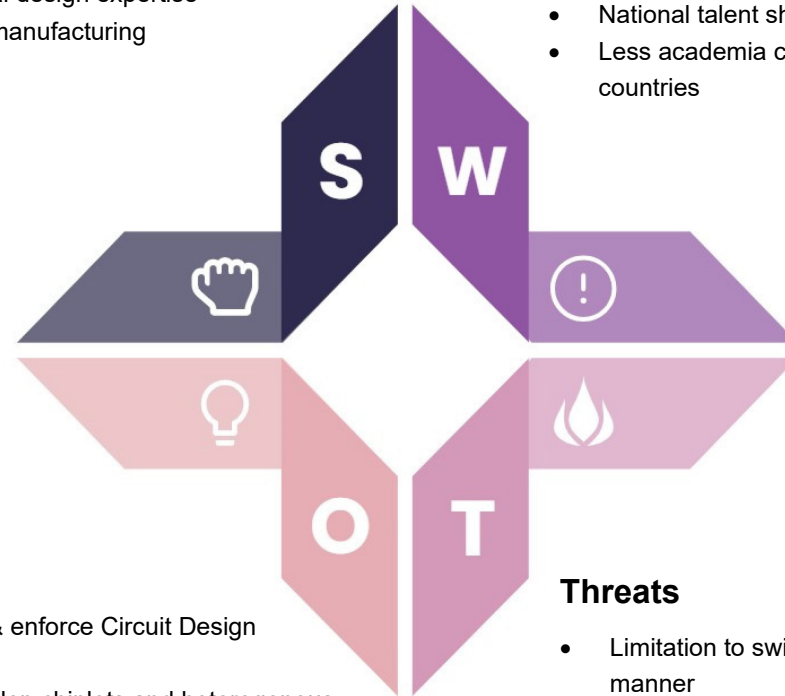
Opportunities

- Assets to enlarge & enforce Circuit Design activities
- Consensus to develop chiplets and heterogenous packaging technologies
- Elaborate on the comprehensive Quantum research activities
- Enlarge Photonics Ecosystem
- Chips Act reshoring production activities
- Utilize position in RF circuit design & manufacturing more
- Maintain and utilize the position of leading equipment manufacturer

Threats

- Limitation to switch to new trends in a timely manner
- (Geo) political decisions
- Growing talent shortage
- Acquisition of Dutch high potential companies by big foreign industry players
- Advantage partly relies on maintaining IP which recuires significant structural investments

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SWOT - Japan

Strengths

- Strong position in semiconductor equipment and materials market
- Mask/reticle inspection Equipment
- CVD/ALD Equipment
- Etching Equipment
- Dicing Equipment
- Wafer prober Equipment
- IC Tester Equipment
- Emerging Photonics Technology (NTT IOWN)
- Significant position in semiconductor application markets
- Rapdius to strengthen manufacturing, with 2nm IC production

Weaknesses

- Few foundries and IDMs
- No EDA tools
- Relative low VC investment in deeptech industry compared to other countries
- Lack of engineer resources
- Too domestically oriented
- Weak start-up/business creation
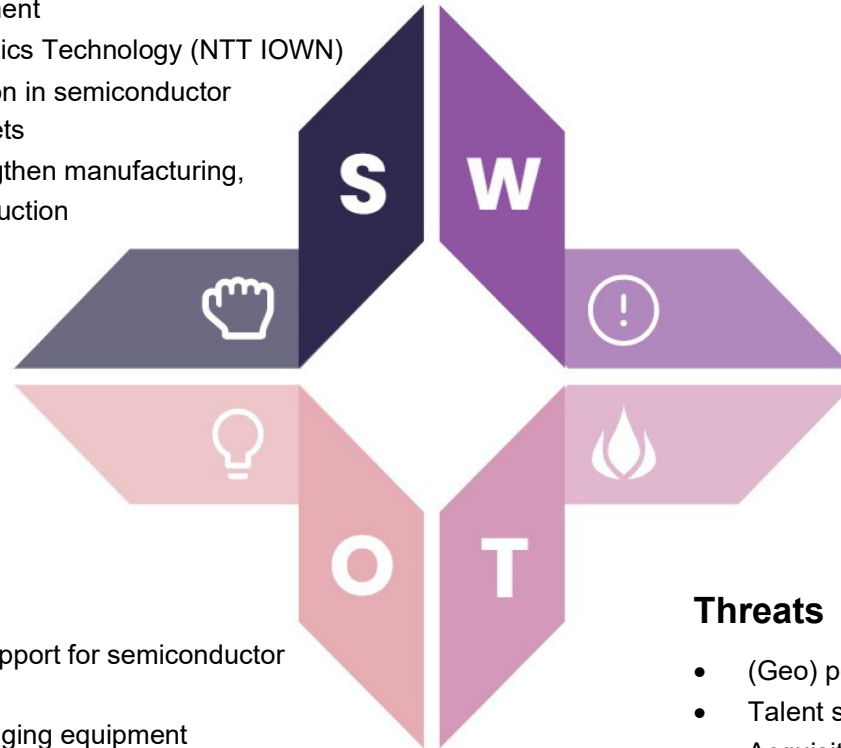
Opportunities

- Government support for semiconductor industry
- Next gen packaging equipment
- Comprehensive Quantum Research
- Enlarge Photonics Ecosystem
- Large investment from other countries and foreign companies
- Elaborate on Rapidus

Threats

- (Geo) political decisions
- Talent shortage
- Acquisition of Japan high potential companies by big foreign industry players
- Political instability
- US government policy change

Key Deeptech Companies & Institutes

Select group based on first mapping (used in Deeptech patent analysis)

The Netherlands

Source: Brainport Development BI

Foreign company

Netherlands

Key Deeptech Companies & Institutes

Se_____ed on first mapping (used in Deeptech patent analysis)

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Dutch & Japanese Deeptech Intellectual Property (IP (2000-2023)

Photomechanical, e.g. photolithographic, production of textured or patterned surfaces, e.g. printing surfaces Materials therefor, e.g. comprising photoresists Apparatus specially adapted therefor using photoresist structures for special production processes

Indexing scheme for arrangements for connecting or disconnecting semiconductor or solid-state bodies and methods related

Semiconductor devices with at least two electrically connected terminals, or combinations of such devices, having a semiconductor body formed by growing or depositing material on a substrate

Processes or apparatus adapted for the manufacture or treatment of semiconductor or solid state devices or of parts thereof

Arrangements for connecting or disconnecting semiconductor or solid-state bodies; Methods or apparatus related thereto

Chemical coating by decomposition of gaseous compounds, without leaving reaction products of surface material in the coating, i.e. chemical vapour deposition [CVD] processes reactive sputtering or vacuum evaporation

Indexing scheme for arrangements or methods for connecting or disconnecting semiconductor or solid-state bodies as covered by H01L24/00

Electric circuit elements or components, not covered by other classes of G06.

■ The Netherlands ■ Japan

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Key Deeptech Research Institutes

Select group based on first mapping

The Netherlands

Japan

Dutch & Japanese Deeptech Research Locations and Publications (2020-2024)

Institute	#Publications	Map location
Delft University of Technology	1.128	1
Eindhoven University of Technology	941	2
University of Amsterdam	693	3
University of Groningen	661	4
University of Twente	609	5
Utrecht University	442	6
Radboud University	440	7

Institute	#Publications	Map location
University of Tokyo	3.954	1
Kyoto University	2.292	2
Riken	2.154	3
Osaka University	1.989	4
National Institute for Materials Science	1.863	5
Tohoku University	1.810	6
National Institute of Advanced Industrial Science and Technology	1.503	7
Tokyo Institute of Technology	1.352	8
Kyushu University	1.295	9
Nagoya University	1.250	10
Hokkaido University	1.012	11
University of Tsukuba	886	12
Keio University	648	13

Source: Brainport Development BI

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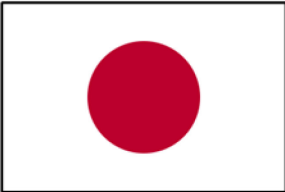
Cross Regional Research Collaborations Amount of Journal Articles & Conference Proceedings Regarding "Semicon OR Photonics OR Quantum" between 2020-2023

	Hiroshima University	Hokkaido University	Keio University	Kyoto University	Kyushu University	Nagoya University	NIMS	IAST	Osaka University	Riken	Tohoku University	Tokyo Institute of Technology	University of Tokyo	University of Tsukuba	Delft University of Technology	Eindhoven University of Technology	Radboud University	University of Amsterdam	University of Groningen	University of Twente	Utrecht University
Hiroshima University	x	22	6	52	25	35	15	36	44	39	38	17	118	40	1	0	0	3	0	0	30
Hokkaido University	22	x	12	72	35	35	106	39	56	36	49	29	88	32	1	0	0	0	0	2	0
Keio University	6	12	x	58	7	27	11	33	34	72	17	21	107	7	2	6	0	0	0	0	0
Kyoto University	52	72	58	x	186	196	51	84	259	168	133	144	393	133	2	14	84	86	11	0	6
Kyushu University	25	35	7	186	x	144	31	49	150	54	73	126	174	93	0	0	75	75	2	0	0
Nagoya University	35	35	27	196	144	x	37	45	171	78	80	112	234	96	0	6	79	85	6	0	5
National Institute for Materials Science (NIMS)	15	106	11	51	31	37	x	86	41	64	81	79	186	132	6	0	0	0	0	3	0
National Institute of Advanced Industrial Science and Technology (IAST)	36	39	33	84	49	45	86	x	130	54	84	79	209	111	4	2	0	0	1	0	0
Osaka University	44	56	34	259	150	171	41	130	x	171	109	119	305	118	3	3	74	82	4	0	0
Riken	39	34	71	168	54	78	64	54	171	x	214	90	624	43	5	5	6	7	6	0	4
Tohoku University	38	49	17	133	73	80	81	84	109	214	x	85	271	36	13	0	4	5	17	0	5
Tokyo Institute of Technology	17	29	21	144	126	112	79	79	119	90	85	x	246	105	3	9	77	79	11	0	5
University of Tokyo	118	88	107	393	174	234	186	209	305	624	271	246	x	190	7	7	88	102	19	7	34
University of Tsukuba	40	32	7	133	93	96	132	111	118	43	36	105	190	x	2	2	74	74	0	0	28
Delft University of Technology	1	1	2	2	0	0	6	4	3	5	13	3	7	2	x	37	7	16	9	17	22
Eindhoven University of Technology	0	0	6	14	0	6	0	2	3	5	0	9	7	2	37	x	4	19	14	21	34
Radboud University	0	0	0	84	75	79	0	0	74	6	4	77	88	74	7	4	x	114	8	10	10
University of Amsterdam	3	0	0	86	75	85	0	0	82	7	5	79	102	74	16	19	114	x	33	24	26
University of Groningen	0	0	0	11	2	6	0	1	4	6	17	11	19	0	9	14	8	33	x	93	24
University of Twente	0	2	0	0	0	0	3	0	0	0	0	0	7	0	17	21	10	24	93	x	19
Utrecht University	30	0	0	6	0	5	0	0	0	4	5	5	34	28	22	34	10	26	24	19	x

Cross Country Collaboration

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Recommendation for future collaboration

JOINT DEVELOPMENT

Optoelectronics and Integrated Photonics: Dutch organizations should explore opportunities within the IOWN and affiliated Japanese organizations to design and develop optoelectronics and integrated photonics.

IC Design and Manufacturing: Rapidus and Chip Competence Centre NL should share roadmaps and look for joint development in IC design and manufacturing.

Heterogenous Integration & Chiplets Technology: Dutch organizations with interest in heterogeneous integration technology and chiplets technology should explore the existing Japanese-German (Fraunhofer) partnership.

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Recommendation for future collaboration

BUSINESS COLLABORATION

Component manufacturing :Japanese equipment manufacturers show interest in the design and manufacturing capabilities of Dutch component manufacturers, especially the capabilities of SMEs, appending they show interest in the Dutch open innovation strategy.

Quantum Computer Technology: Japanese research organizations and companies show interest in the hardware solutions for quantum computers of Dutch companies and want to collaborate in co-development of hardware and software, especially algorithms. A good point of entry for this is via Q-star.

Materials & Material Processing: Japanese companies possess knowledge in the materials domain where Dutch companies are in need for: material substitutes, superconducting materials, and material processing techniques such as sintering.

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Recommendation for future collaboration

RESEARCH

Research in Communication & Quantum Technology: Dutch research organizations should look for research collaboration with Japanese organizations in communication technology & devices and quantum solutions for quantum computer and network. RIKEN and Technical Universities in Delft and Eindhoven should look for collaboration in multiple quantum domains. Collaborations between Kyoto University and Eindhoven University of Technology could yield advancements in developing communication technologies.

Research in IC Design and Development: Expanding the collaboration between Twente University and Tokyo University presents promising avenues for joint research efforts in IC design and development.

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Recommendation for future collaboration

HUMAN CAPITAL

Human Capital: Technical talent shortage and development are common issues for Japan and the Netherlands. In this domain universties can take the initiative and align their proposed research collaboration with sharing human capital, e.g. student exchange.

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GROUND

Road 2 Osaka

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I would love to continue the conversation.

Please e-mail us at n.verstraeten@brainportdevelopment.nl

NL

Name: Naomie Verstraeten
Title: Chief Innovation & Technology
Phone number: 00 31 6 1190 3946
E-mail: n.verstraeten@brainportdevelopment.nl

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3. Sub-track Digitalization (DX)

AI & Data

Speaker: Tijs Koops

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Subtrack DX
AI & Data

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Road 2 Osaka

Innovation mission AI & Health

Fact Finding mission Topsector ICT

Subtrack DX – AI & Data

- **Artificial Intelligence**

- **Data Science, data analytics and data spaces**

- NL AIC / AiNed

- Centre of Excellence Data Sharing & Cloud

- Publiek Private Samenwerking

  - G2G [NTS, SDE en DOSA]

  - B2B / B2G

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	HT1: Equipment	DX1: AI & Data
18-05-2025 Sunday	Arrival Tokyo: HT-group 1	Arrival Tokyo: DX-group 1
19-05-2025 Monday	Tokyo company visits	Tokyo company visits
20-05-2025 Tuesday	Tokyo company visits + Embassy	Tokyo company visits + Embassy
21-05-2025 Wednesday	Train to Osaka + Expo free	Train to Osaka + Expo free

	HT2: Chip Design	DX2: 5G/6G	
	Arrival Osaka: HT-group	Arrival Osaka: DX-group	21-05-2025 Wednesday

22-05-2025 Thursday	High-level HTDX conference + reception	22-05-2025 Thursday

23-05-2025 Friday	AM: HT-event at pavilion – PM: company visits	23-05-2025 Friday
	AM: company visits – PM: DX-event at pavilion	

24-05-2025 Saturday	Departure Osaka	Departure Osaka

	HT2	DX2	
Expo free	Expo free	24-05-2025 Saturday
Train to Tokyo	Train to Tokyo	25-05-2025 Sunday
Tokyo company visits	Tokyo company visits	26-05-2025 Monday
Tokyo company visits + Embassy	Tokyo company visits + Embassy	27-05-2025 Tuesday
Departure Tokyo	Departure Tokyo	28-05-2025 Wednesday

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NL AI Coalitie

AiNed

CoE DSC

Subtrack DX – AI & Data

Society 5.0 <> Digital Trust

- Development Large Language Models > GPT JPN

- Collaboration Super Computer 'Fugaku' > Riken Center for Computational Science & Fujitsu (HPC)

- Collaboration AI Act, Japan AI Safety Institute (AISI)

- Development of Data Spaces for…

  - Health, Smart Industry, Automotive

  - Including DATA-EX (IDSA / GAIA-X) and Ouranos (Cross Border Data Sharing)

- Data Free Flow with Trust > *MoU on Digital Identities and Trust services signed by Commissioner Breton and Minister Kono*

- Digital Product Passports

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Netherlands オランダ

Domo Arigato!

NL
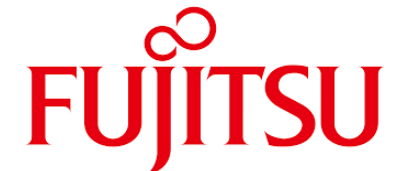
Tijs Koops
Program Manager Internationalisation
Tijs.koops@topsector-ict.nl

follow us

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3. Sub-track Digitalization (DX) 5G/6G

Speaker: Jos Berière

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6G Services will enable the full Digital Society in

Mobility

- All people can move efficiently
- Mobility inclusive
- Collaboration vehicles & cities

Industry

- Adeptive factories
- Local supply chains

Transport

- Accessiblity rural
- Competitive & sustainable

Smart Grid

- Sustainable electrified society
- Realtime interconnected supply & demand

Immersive experience

- Entertainment in virtual space
- Holographic communication
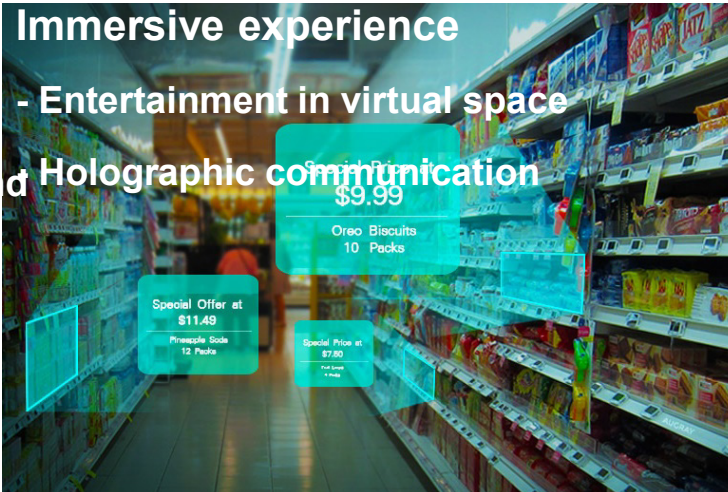
Health

- Extend healthy lifespan
- Support ageing society

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Japan and Netherlands have a similarly structured 6G program

XGMF
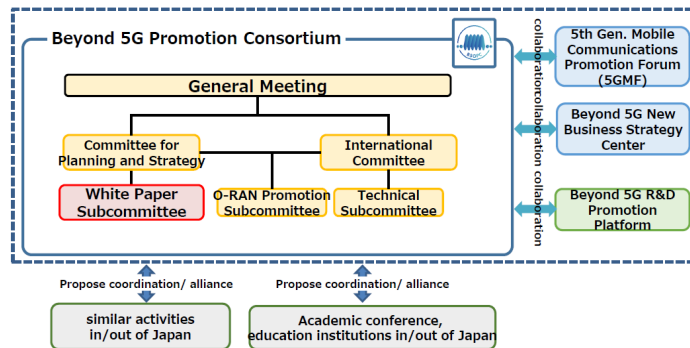
XG Mobile promotion Forum
- 2023 - 2027
- 520mE research funding from NICT

~ 100 partners (est)
- Universities, research, industry, government, end-users

Program coordination by companies with university as president

FUTURE NETWORK SERVICES 6G

- €315 million National 6G program 2024-2030
  - €203 million Subsidies National Growth Fund
  - €112 million Co-Financing by private partners

- 60 partners
  - Universities, research institutes, government, industry and end-users

- Program includes €90 million Open Calls

- Start of program 1 January 2024
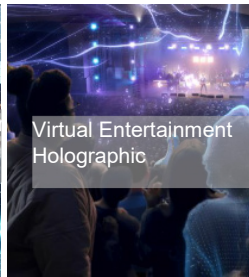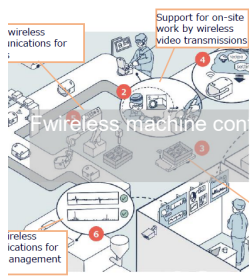
- Overall program coordination by TNO

My Japanese 6G twin

4. HTDX-track program

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Speaker: Eric van Kooij

NL Netherlands

HTDX program

Theme week: "The Future of Community and Mobility Week" (Thursday 15 – 26 Monday, May)

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	HT1: Equipment	DX1: AI & Data				
18-05-2025 Sunday	Arrival Tokyo: HT-group 1	Arrival Tokyo: DX-group 1				
19-05-2025 Monday	Tokyo company visits	Tokyo company visits				
			HT2: Chip Design	**DX2: 5G/6G**		
20-05-2025 Tuesday	Tokyo company visits + Embassy	Tokyo company visits + Embassy				
21-05-2025 Wednesday	Train to Osaka + Expo free	Train to Osaka + Expo free	Arrival Osaka: HT-group	Arrival Osaka: DX-group	21-05-2025 Wednesday	← National Day
22-05-2025 Thursday	High-level HTDX conference + reception				22-05-2025 Thursday	
23-05-2025 Friday	AM: HT-event at pavilion – PM: company visits				23-05-2025 Friday	
	AM: company visits – PM: DX-event at pavilion					
24-05-2025 Saturday	Departure Osaka	Departure Osaka	Expo free	Expo free	24-05-2025 Saturday	
25-05-2025 Sunday			Train to Tokyo	Train to Tokyo	25-05-2025 Sunday	
26-05-2025 Monday			Tokyo company visits	Tokyo company visits	26-05-2025 Monday	
27-05-2025 Tuesday			Tokyo company visits + Embassy	Tokyo company visits + Embassy	27-05-2025 Tuesday	
28-05-2025 Wednesday			Departure Tokyo	Departure Tokyo	28-05-2025 Wednesday	

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HTDX conference, Thursday 22-05-2025

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Principles:

- **Delegation presentations (company/product pitches)**
  o In breakout rooms per delegation group

- **Arrival of high-level attendees**
  o Opening HTDX-lunch
  o Signing moment + photo moment
  o Keynotes (NL + JP)

- **Breakout rooms**
  o Thematic sessions

- **Networking reception**
  o Company exhibits

	Top-VIPs	VIPs (NL + JP)	VIP Delegation (NL + JP)	Delegations			
9:00 – 12:00		Morning program and move to conference venue		Equipment: (HT1-delegation)	Chip Design: (HT2-delegation)	AI & Data: (DX1-delegation)	5G/6G: (DX2-delegation)
12:30 – 14:00		Lunch + Keynotes + Society 5.0 + Photo moment					
14:00 – 15:45		Leave venue		Computing: AI & quantum	Ecosystem: Open innovation + living labs	Technology: Nextgen. semicon chip & equipment	Human Capital: Human resources & public outreach
15:45 – 17:45				Reception			

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Pavilion event, Friday 23-05-2025

- Matchmaking event
- 2 hours in total
- Morning and afternoon

Time	Description	Remarks
15 min. in advance	Doors open/registration	Design: - Participants: 50 NL + 50 JP - Scheme of 1-on-1 discussions predetermined - High 'party' tables (standing 1-on-1 discussions) - The second floor can be used for participants which do not have a 1-on-1 discussion - Screen/projector for PowerPoint opening/introduction - Self service coffee/tea/snacks
20 min.	Opening by Embassy and Japanese speaker + introduction of delegation	
1 uur	1-on-1 discussions (15 min. x3 rounds x 10 stands)	
35 min.	Interaction with coffee	
5 min.	Closing remarks	

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Long list Japanese

HT			HTDX	DX	
Companies	Shimadzu	NIMS	**Companies**	**Companies**	**Government**
Asahi Kasei	Sony Semicondoctor Solutions Corporation	**Government**	Canon	AI Global Japan	Cabinet Office (CSTI)
Epson		MEXT	Fujitsu	AI&B	Ministry of Internal Affairs and Communication (MIC)
Gigaphoton	Shinkawa Ltd	**Universities**	Hitachi Hightech	AIP	
Hamamatsu Photonics	Shin-Etsu	Keio University	Kyocera	AIR Lab	Digital Agency
JSR	Sumco	Kobe University	NTT	AIRC	**Universities**
KIOXIA corporation	TEL	Kumamoto University	NTT Basic Research Laboratories	CiNet	the University of Tokyo
Lasertec	Toshiba	Kyoto University		Dai Nippon Printing	University of Tsukuba
Mitsubishi Electric	Toyota	Kyushu University	Panasonic	DENSO	University of Tsukuba
NEC	TSMC Japan	Nagoya University	Fuji-Film	Preferred networks	
Omdia	**Knowledge institutes**		**Knowledge institutes**	Rakuten	
Qunasys	Leading-edge Semiconductor Technology Center		AIST	Softbank Group	
Rapidus			NICT	Sony AI Inc.	
Renesas	National Institute for Quantum and Radiological Science and Technology		RIKEN	Toshiba Digital Solutions Corp.	
Resonac			**Government**		
Rohm			METI	Woven City	
Screen	National Institute of Informatics		NEDO	**Knowledge institutes**	
Sharp			**Universities**	NII	
			Osaka University		

HTDX Planning

Date	Road2Osaka
18-22 March 2024	JP Deeptech Delegation to NL
May 2024	Draft program ready
May 2024	Submit PPP Deeptech proposal
27-31 May 2024	Innovation Mission AI for health
17 June 2024	Business Event in Leiden
Mid-July 2024	First online information session
October 2024	Second online information session
November 2024	Brabant Innovation Day
December 2024	Semicon Japan Expo
January 2025	Nanotech Expo
End of February 2025	Delegation ready and Delegates informed
Mid-April 2025	Finalized program
Mid-April 2025	Kick-off session about the program
14-27 May 2025	**HTDX-track mission**
October 2025	Brabant Innovation Day
After Osaka Expo	Deepen and widen relations

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Core team

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Ministerie van Economische Zaken en Klimaat

Wilbert Schaap
Brian Huijts
Nicole Dirksen

High Tech NL
Share innovation. Shape tomorrow.

Tom van der Dussen
Micha Tahar

Quantum Delta NL

Mayra van Houts
Anna Grashuis

BRAINPORT EINDHOVEN

Ronnie Kuppens

Brabantse Ontwikkelings Maatschappij
BOM

Toine Cleophas

NXT GEN hightech

Monika Hoekstra
Marijn Berg

Netherlands Innovation Network

Eric van Kooij
Rob Stroeks
Sonoko Takahashi
Linso van der Burg

PhotonDelta
Gateway to Integrated Photonics

Floris Maassen

Ministerie van Buitenlandse Zaken

Willeke van der Dussen

Rijksdienst voor Ondernemend Nederland

Ruben Wassink
Kamal Afarmach

TOPSECTOR ICT
dutch digital

Tijs Koops

NL Netherlands

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5. Q&A

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6. Closing

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