

Conference 22 May 2025

Afternoon – Cross-over sessions

There are twice, five sessions at the same time of 60 min each, with a 15 min break in between. This allows the participants to attend two different sessions.

- Panel discussion setup

- Opening
- 2 Keynote speakers (NL-JP) 5 min each (with slides)
- 2-4 Panelists (NL-JP) 3 min each (no slides)
- Discussion
- Conclusion and closing

➤ **Session 1: The future of computing and networks – Panel discussion setup**

All photonic systems (incl. photonic chips and other equipment), advanced wireless networks, and high-performance computing are essential for a fully digitalized and sustainable society that is rooted in ultra-fast data transfer, low latency, and high security.

We will discuss what is needed to make such a transition, who takes which role? Where would the uptake begin? What are the challenges? What are the benefits? Where is the common ground?

Key words: All photonics networks, advanced wireless networks, photonics systems, optical networks, HPC, quantum computing.

- Audience: AI and computing researchers; network providers

➤ **Session 2: Ecosystem creation and open innovation– Panel discussion setup**

With increasing complexity of products, services and manufacturing processes, the ability to collaborate with external parties is becoming an advantage or in some cases even a necessity. Being part of an ecosystem or practicing open innovation provides fast access to state-of-the-art technology and multi-disciplinary expertise to create a competitive advantage.

We will discuss the benefits and explore real-world examples for inspiration. We will also investigate what kind of collaborations are needed to realize a truly digitalized society tomorrow. What can we learn from each other and what is our common ground?

Keyword: Ecosystem creation, open innovation, public-private partnerships/ quadruple helix

- Audience: Policy makers; HR professionals; alliance /consortium/ partnership managers; new business developers; supply chain professionals;

➤ **Session 3: Creating digital trust – Panel discussion setup**

The fundament to realise a digital society is digital trust. This goes via technology, policy, and safety. Data privacy and security as a foundation for trust, and trust as a core design principle when developing digital technologies are ways for technology vendors and service providers to take their responsibility.

We will discuss practical approaches on how to secure user data, while enabling businesses to innovate via privacy by design, designing for transparency and user control, how to store and handle data, and hardware solutions.

Keywords: Hardware, software, encryption, privacy & safety protection, privacy regulation, data handling

- Audience: Policy makers; cyber security/encryption related organizations & researchers, hardware vendors, service providers

- Showcase setup
 - Opening
 - Introduction Growth markets and Society 5.0 (2x5 min)
 - 2 NL, 2 JP showcases (4x 8 min incl. Q&A)
 - Panel discussion
 - Closing

- **Session 4: HTDX showcases in growth markets for Society 5.0 – Showcase setup**
What is the envisioned future that we are trying to build? How does society function in 15 to 20 years from now? Which applications are impossible today, but should we be ready to embrace?

We will give visionary organizations from various sectors the floor to inspire the audience, with applications that are not just music for the future, but actually under development.

- Audience: Researchers; New business developers; Technology vendors; Technology users; Policy makers

Example of a showcase:

<Sensing – tbc >

<Infrastructure maintenance – tbc >

Speakers and topics to be decided after registration confirmation

- Roundtable setup
 - Opening
 - Introduction Project Beethoven, LSTC programme (2x 5min)
 - Roundtable discussion
 - Conclusion and closing

- **Session 5: Roundtable on talent ~ Life-long learning in deeptech and digital**
In the age where digitalisation is spurring, digital skills are becoming increasingly needed. The development of knowledge and technical- and digital skills need to be continuously updated at a higher pace. Not only the initial educational system has to be adjusted to the new age, but also the concept for life-long learning is of increasing importance.

We will discuss how higher education, private companies and knowledge institutions could work together to realise an attitude and system change. On one hand to establish this nationally as well as internationally as a collaboration between NL and JP for research and talent development and exchange.

Keywords: talent development, digital skills, educational change, life-long learning

- Audience: Educational professionals; Policy makers; HR managers; Researchers, Business representatives