

ITEA PO Days 2026

Welcome to the ITEA Award of Excellence ceremony 2026

15 September 2026, Istanbul





Winner
ITEA Award
of Excellence
2026

Innovation

AI FORSchung

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Innovation

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ITEA PO Days 2026

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ITEA Award of Excellence 2026 ceremony 'Innovation'
15 September 2026
Ahmet Ekin

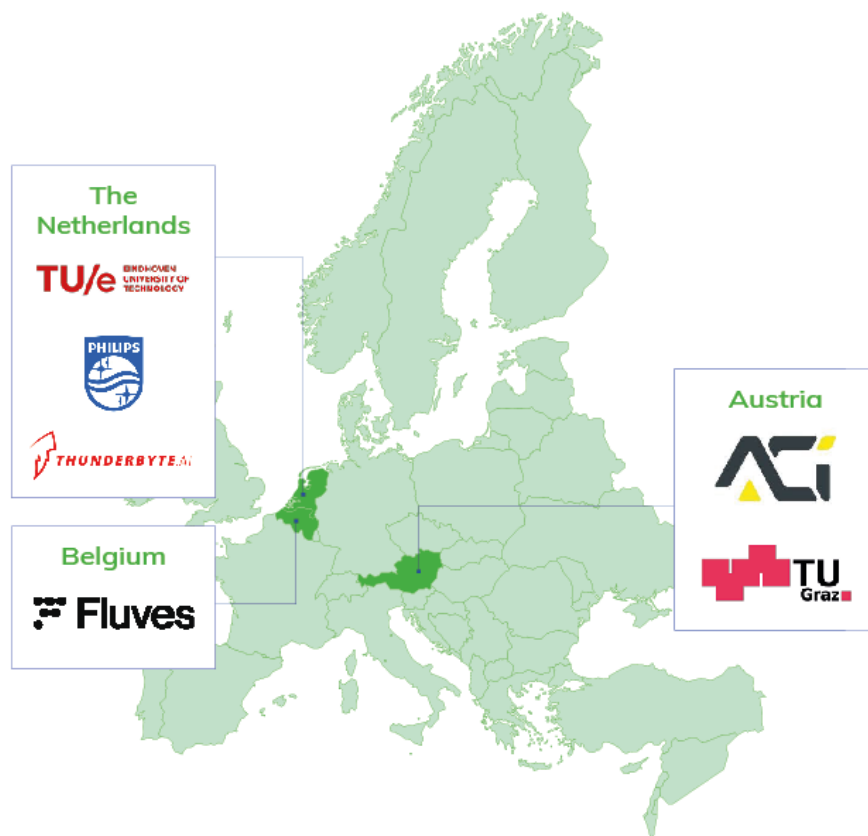


AI FORSchung

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Improving fiber-optic sensing (FOS) with artificial intelligence

This project has received funding from:



Project duration:

Sept 2022 – Aug 2025

Project website:



Improving fiber-optic sensing (FOS) with artificial intelligence

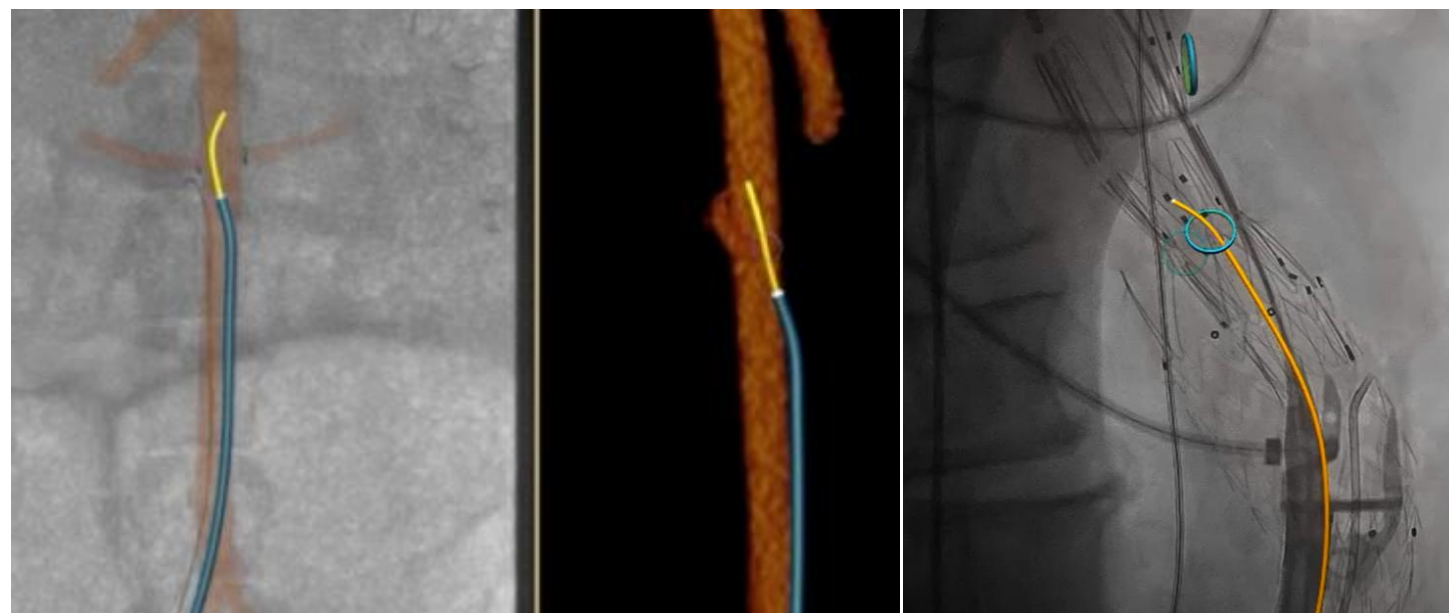
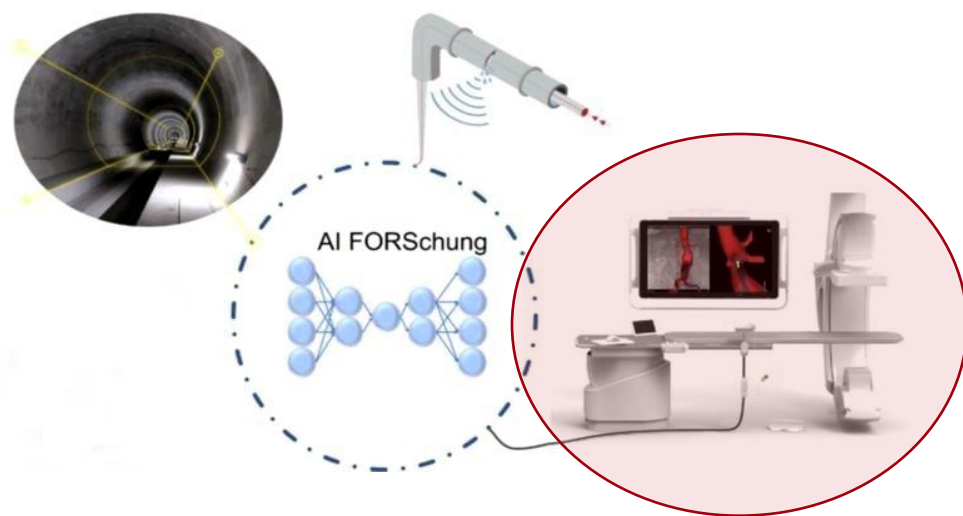
Bring together experts, data, and application knowledge in fiber-optic sensing from healthcare, civil infrastructure, and utilities sectors to develop unified, AI-based data analysis framework for next-generation FOS applications.



FOS is enabling critical applications

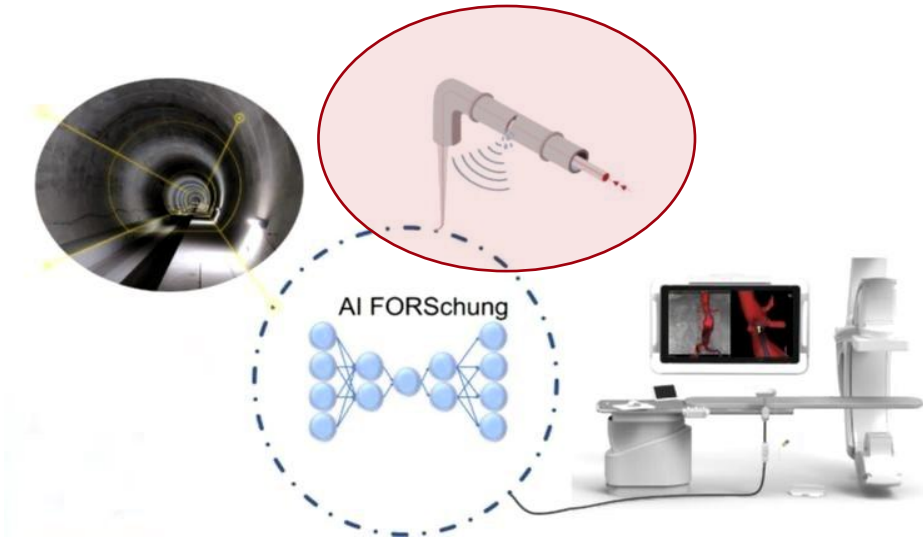
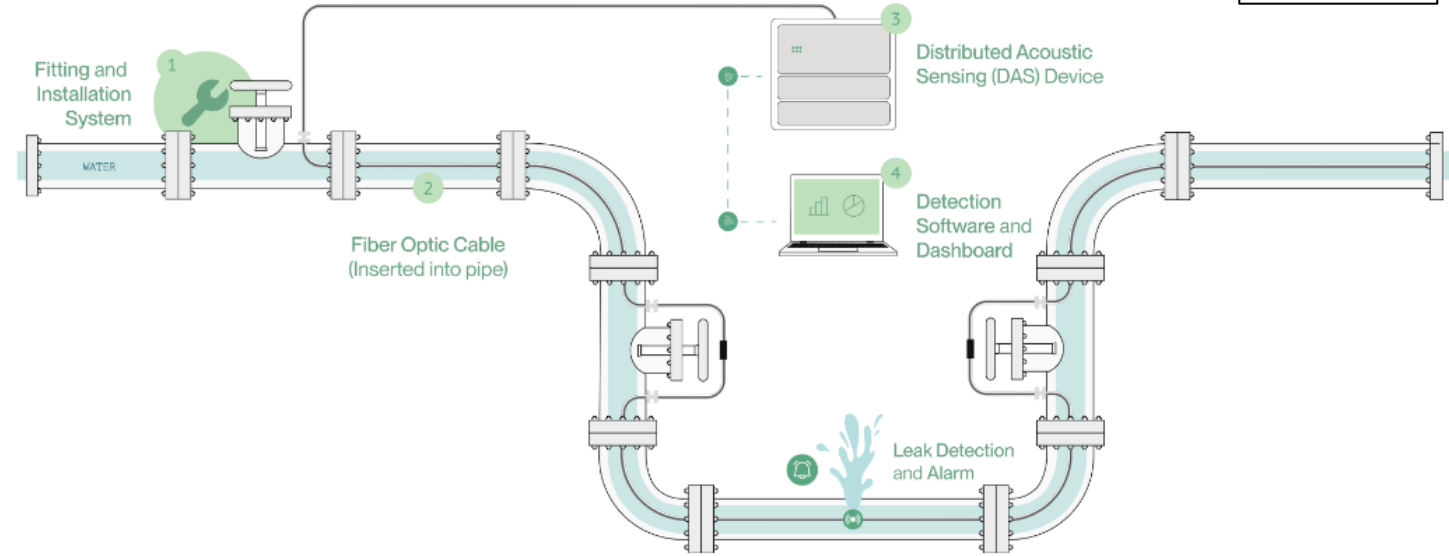
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Navigating wires and catheters (2-3m)
in minimally invasive therapies



FOS is enabling critical applications

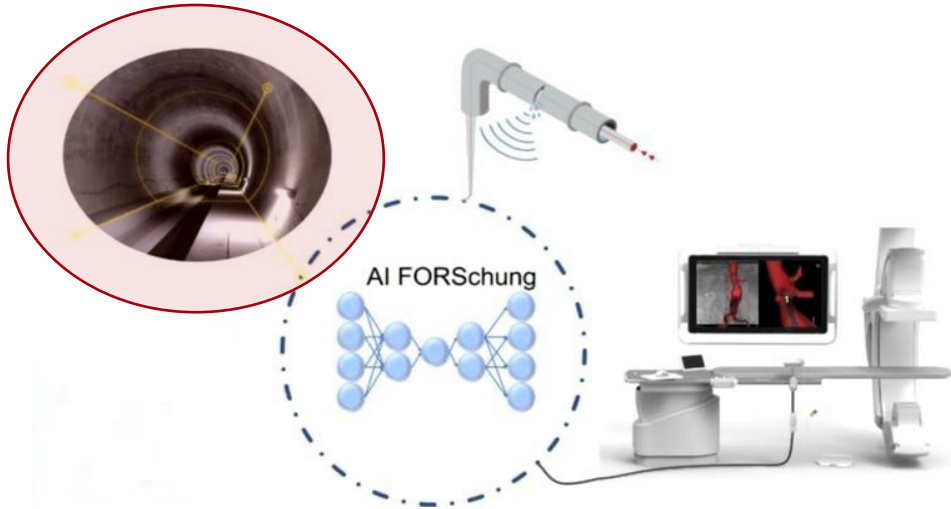
Leak and intrusion detection in water pipelines (10m to 50km)



FOS is enabling critical applications

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Monitoring of large-scale civil infrastructure (30m to 60 km)



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Challenges addressed and Impact

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FOS generates large amounts of data resulting in:

- Limited on-site storage & high service need
- Missed or late-detected key events

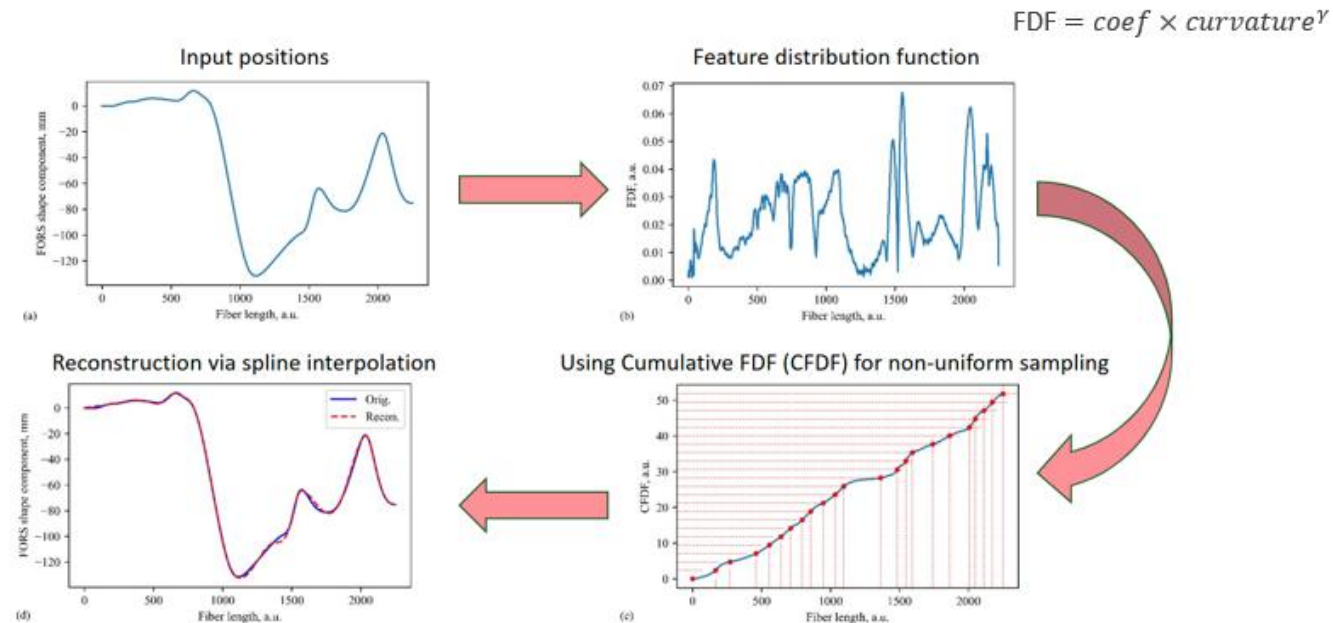
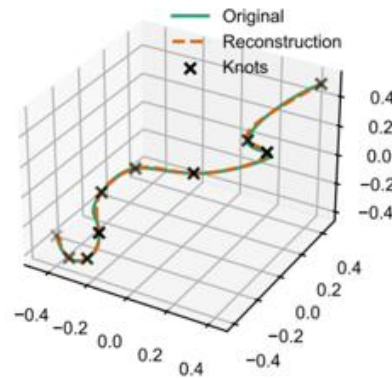
AI FORSchung proposes:

- Intelligent FOS data compression
- Robust & fast anomaly detection for life-critical alerts
- Scalable data analysis framework

Market & Impact:

- Savings with reduced storage and service
- New markets with better anomaly detection
- Generic FOS data analysis methods

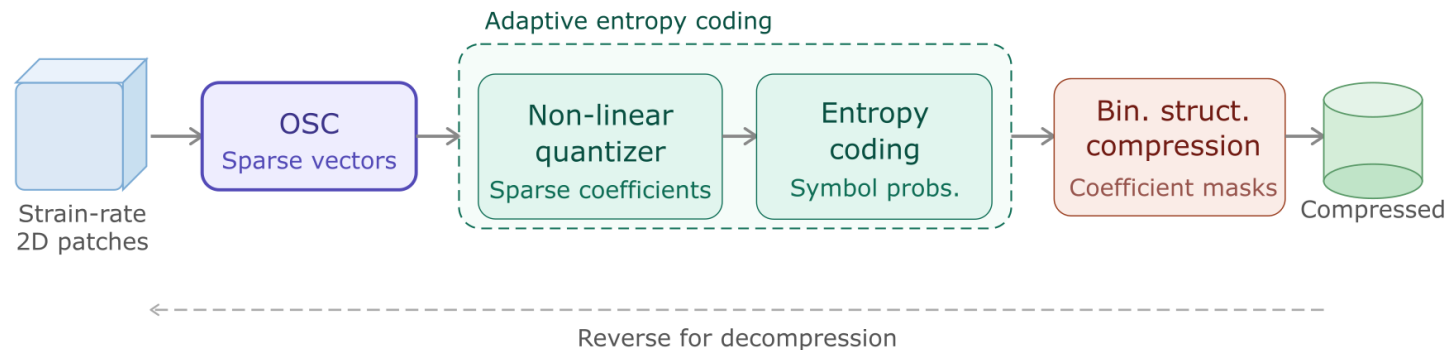
- Fast, transform- and spline-based 3D FORS data compression
 - 3 publications (SPIE Medical Imaging, MICCAI Shape MI)
 - Around 20:1 compression on position data, higher if temporal information is used



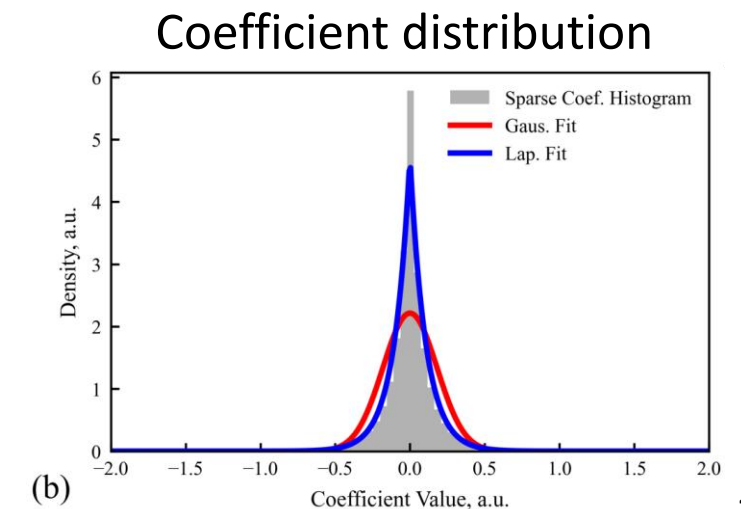
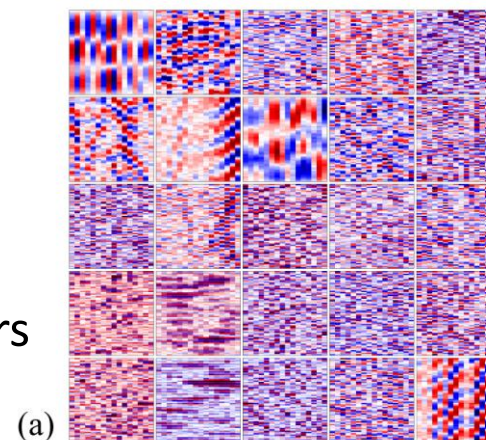
Main achievements

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- Fast compression of distributed acoustic sensing (DAS) with orthogonal sparse coding
 - 2 publications (SPIE Sensors + Imaging. In review, Journal of Remote Sensing)
 - Up to 13:1 compression with SNR of 13dB and PSNR of 28dB.



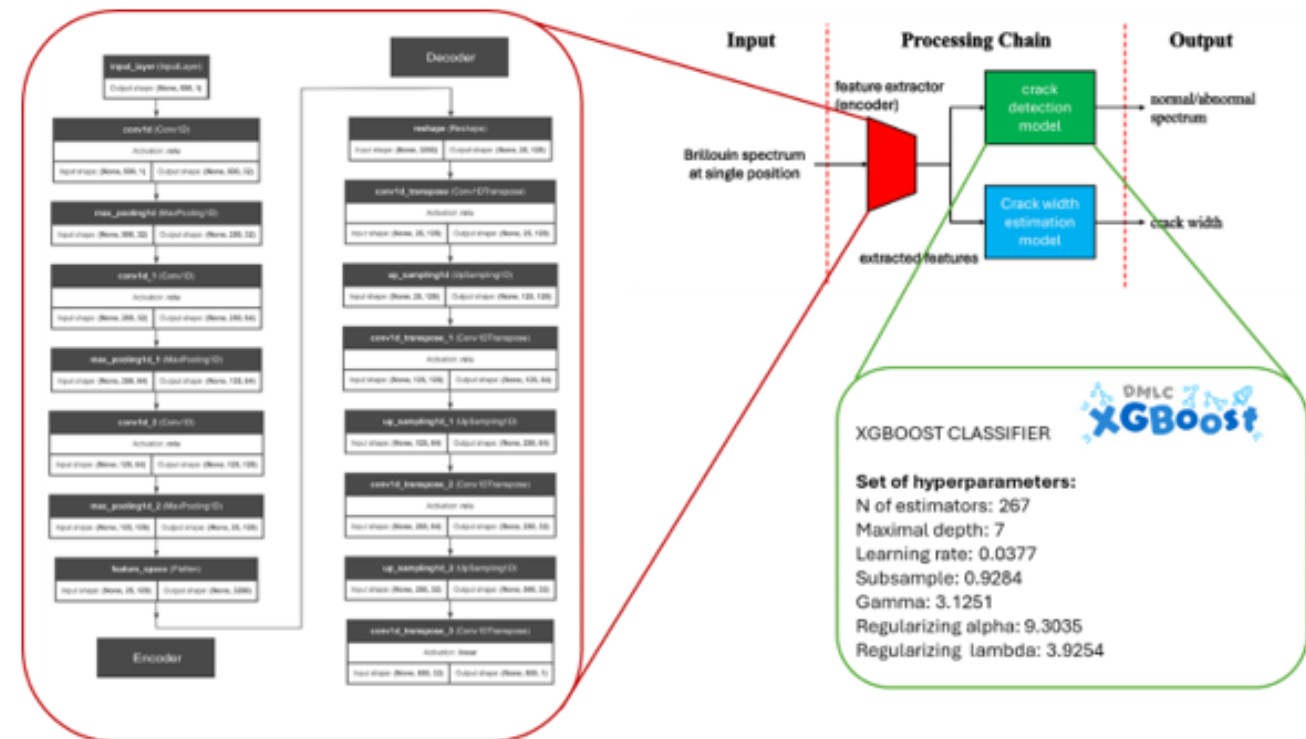
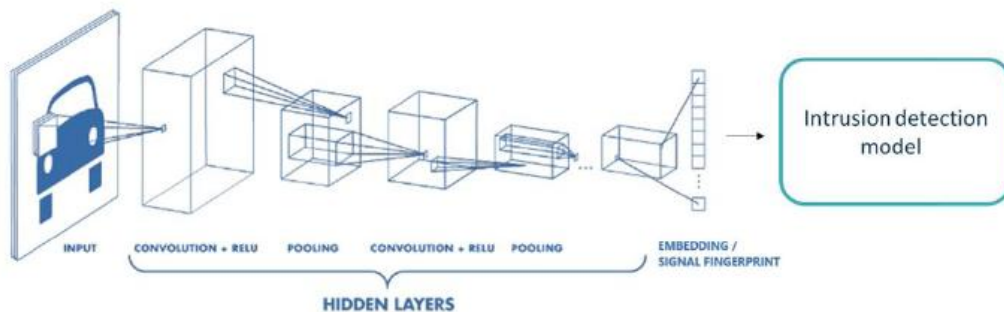
Learned priors



Main achievements

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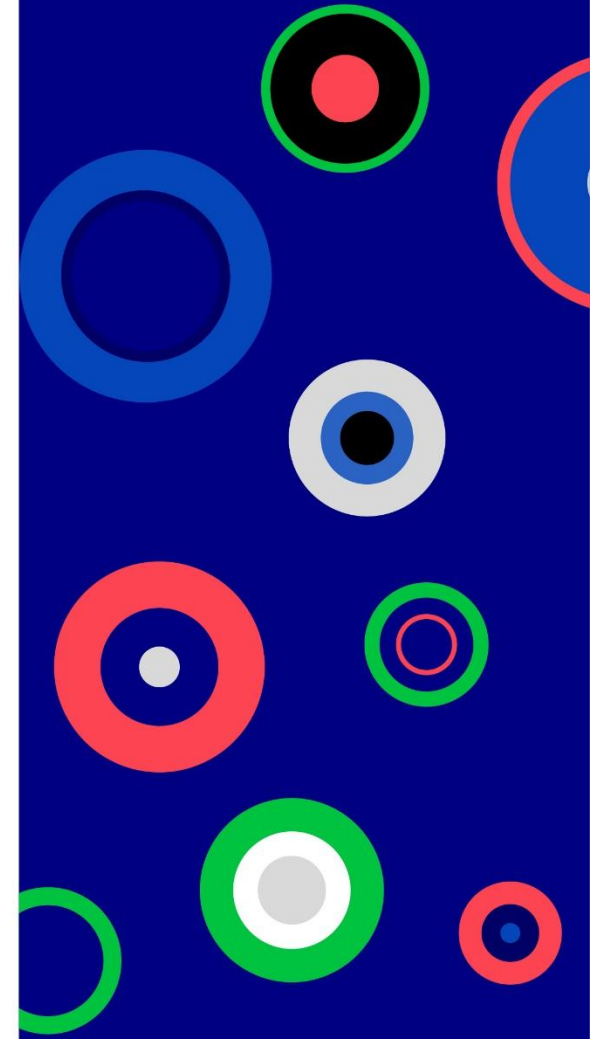
- Anomaly detection algorithms for use cases
 - Intrusion detection at Fluves
 - Crack detection at ACI
 - Outlier shape detection at Philips



AI FORSchung

Advice to (future) ITEA project partners

- Ambitious, business-relevant, and concrete KPIs with clear path towards product features
- Motivated and knowledgeable team with the shared aim of making the project a success
- Balanced emphasis on academic and business priorities
- Agile project management with multiple ways to mitigate technical, business, and resource risks

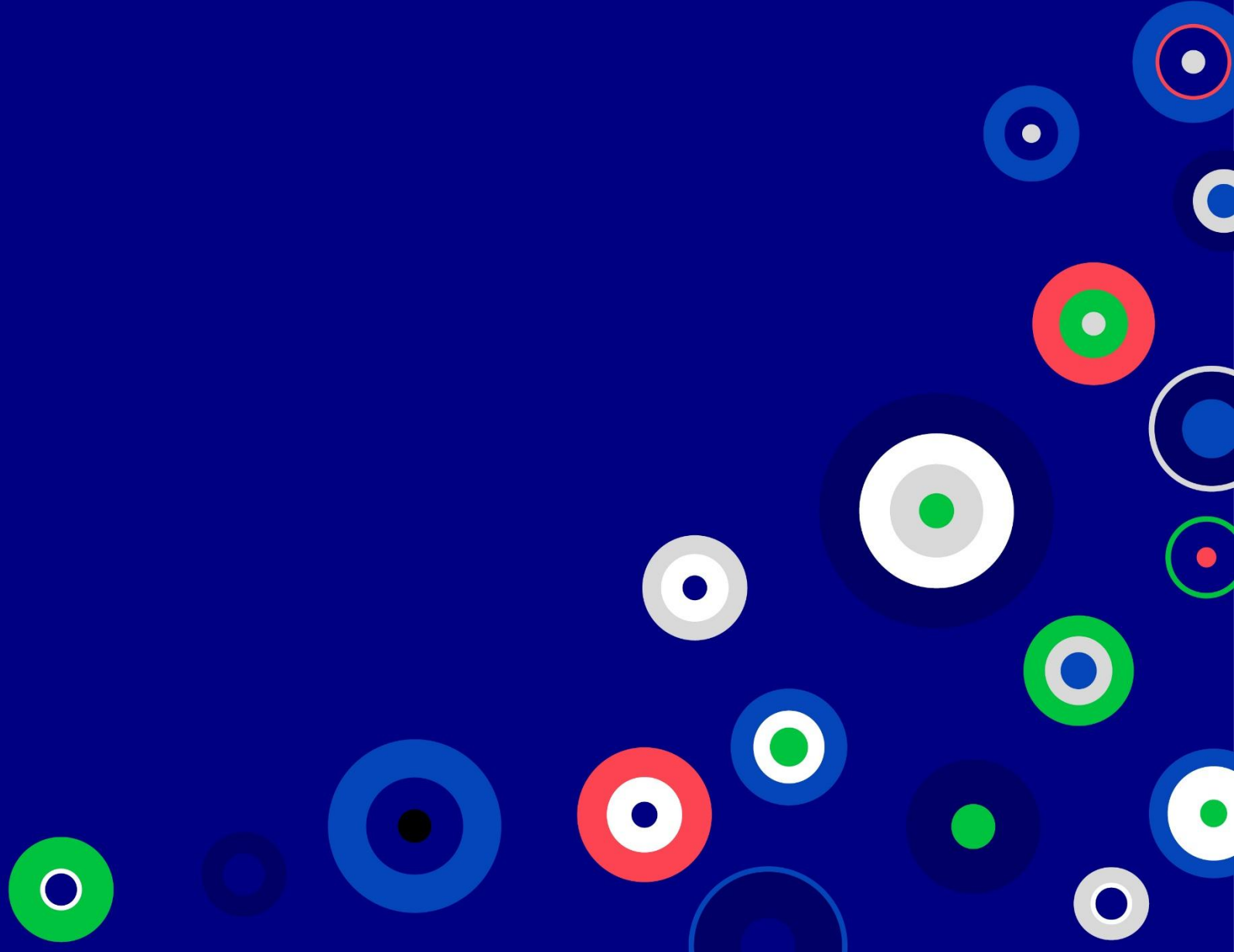


Work Package leaders - Contact details

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- **Special Thanks to:**
 - **Sudhanshu Gupta**, Fluves
 - **Roman Pavelkin**, TU/e
 - **Madeleine Winkler**, ACI Monitoring
 - **Anna Gumenyuk**, Thunderbyte.AI

Thank you!



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Impact

AI

FAMILIAR

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FAMILIAR

ITEA Award of Excellence 2026 ceremony 'Impact'
15 September 2026
Sebastian Knauf

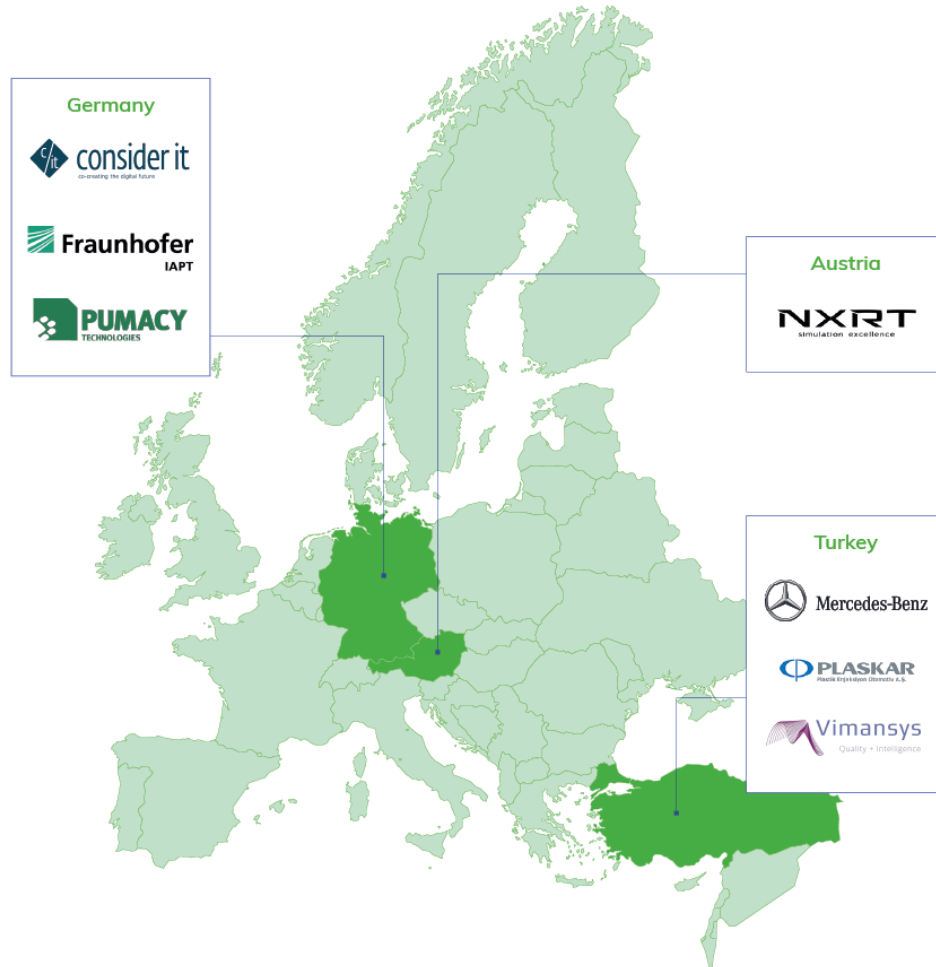


FAMILIAR

Project data

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This project has received funding from:



With funding from the:



Project duration:

June 2022 - Sept 2025

Consortium:

7 partners

Project website:

familiar-project.eu



FAMILIAR

Project rationale

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The problem

Companies sit on valuable data about their machines, vehicles and processes – but sharing it with others feels too risky. Hence, AI development stayed siloed, cut off from the immersive XR tools that could put it to work.



Our goal

Combine privacy-preserving AI with XR headsets, so partners can finally collaborate on shared challenges – without any sensitive data ever leaving their site.



FAMILIAR

Outcomes developed

One core innovation, put to work in four real industry testbeds:



Automotive

AI-supported XR tools that auto-generate vehicle-simulation setups (AVL, NXRT)



Additive manufacturing

An AI+XR assistant guiding technicians step by step through 3D-printing robot setup (IAPT)



Production

AI, digital twins and XR combined into a real-time shop-floor quality-control system



Road safety

A V2X-connected XR system that helps vehicles detect vulnerable road users earlier

FAMILIAR

Impact

What those innovations delivered, measured in the field:

- **Faster development:** simulation prep time cut from days/weeks to minutes
- **Zero interruptions:** 3D-printing robot setup sped up, process interruptions cut to zero
- **Less waste:** AI-guided quality control cut scrap rates by 10% in production
- **Safer roads:** up to 75% lower collision risk for vulnerable road users (~4x faster reaction time)



Already commercial

NXRT turned FAMILIAR technology into a real product before the project even ended

100+

customers already served

~€1M

revenue generated to date

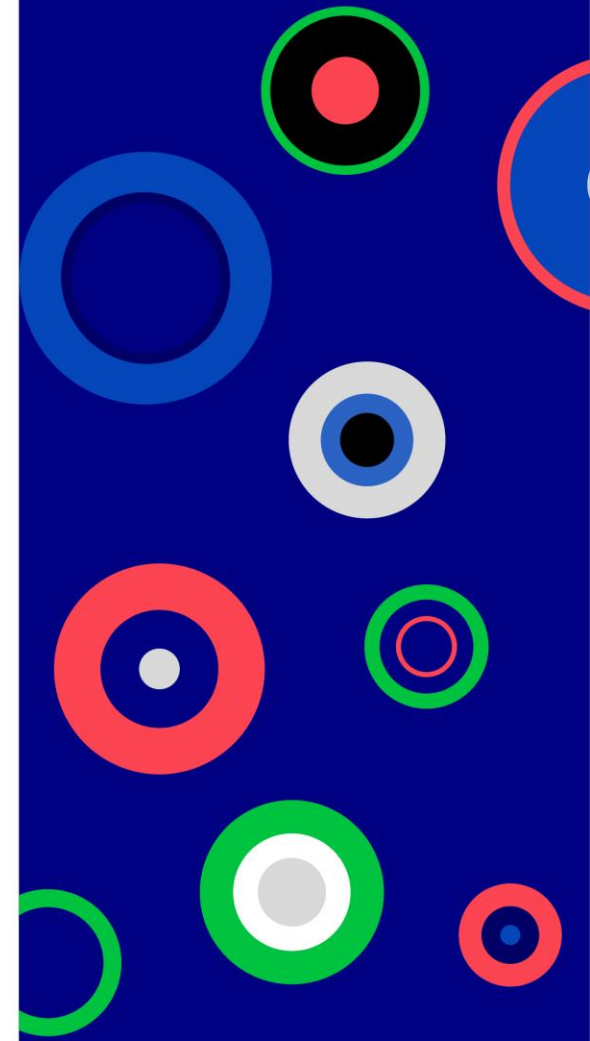
~160

new 3D-model systems planned for 2026

FAMILIAR

Future outlook

- Fast-track commercialisation of the other three use cases, using NXRT's in-project product launch as the blueprint
- Scale NXRT's mixed-reality platform further: already 100+ customers, with ~160 more systems planned for 2026
- Extend AI-guided quality control (10% scrap reduction) to more production lines and partners
- Broaden the V2X road-safety system toward wider real-traffic deployment



FAMILIAR

Advice to (future) ITEA project partners

- Anchor use cases in measurable, real-world metrics: time saved, scrap reduced, collisions avoided
- Involve partners who can commercialise early, and fund go-to-market work from month one: NXRT turned FAMILIAR technology into a shipping product before the project even ended
- Combine emerging technologies deliberately (federated learning + XR) rather than developing them in isolation
- Resource dissemination and community upkeep as a dedicated task from day one

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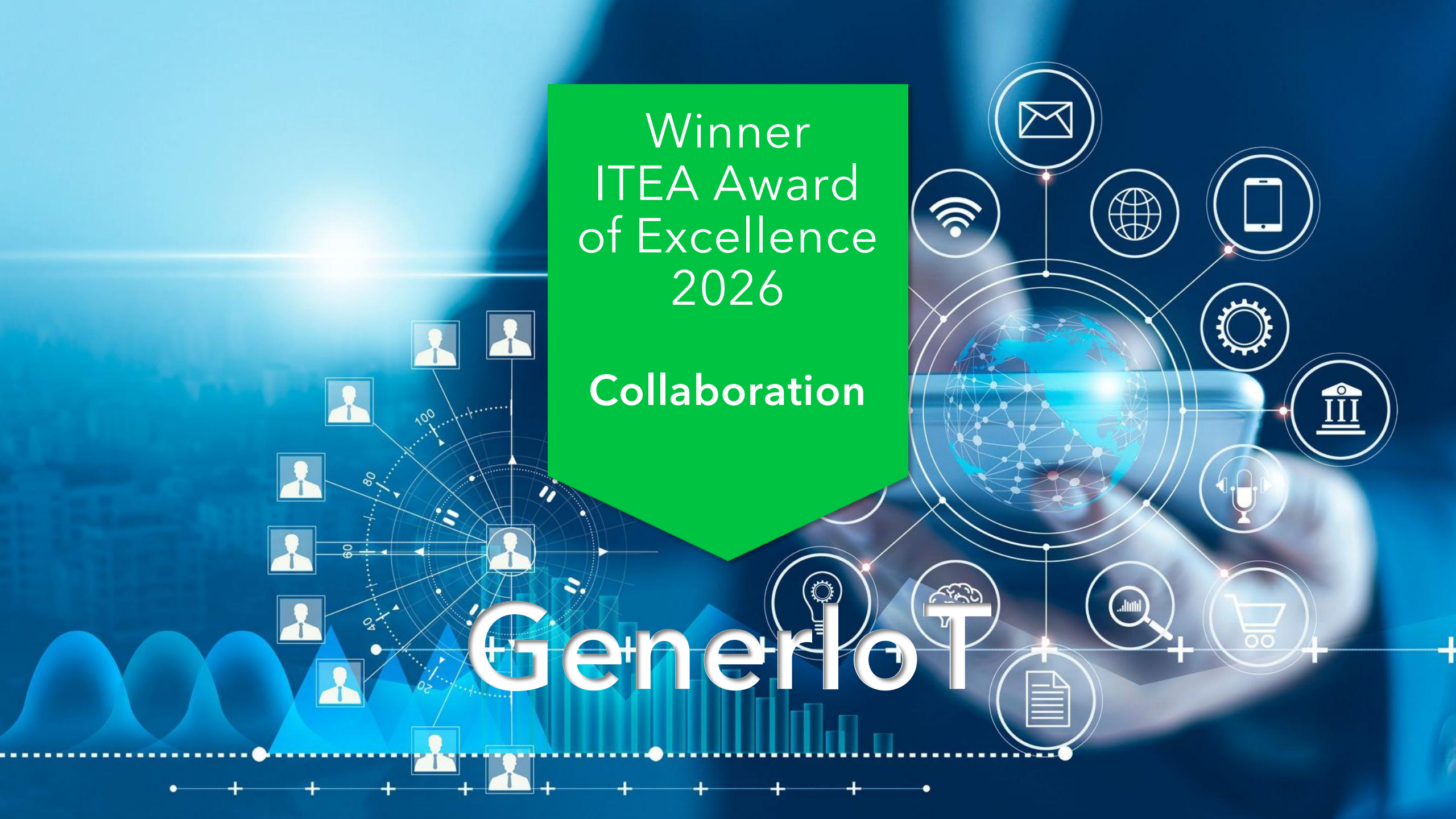
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Collaboration

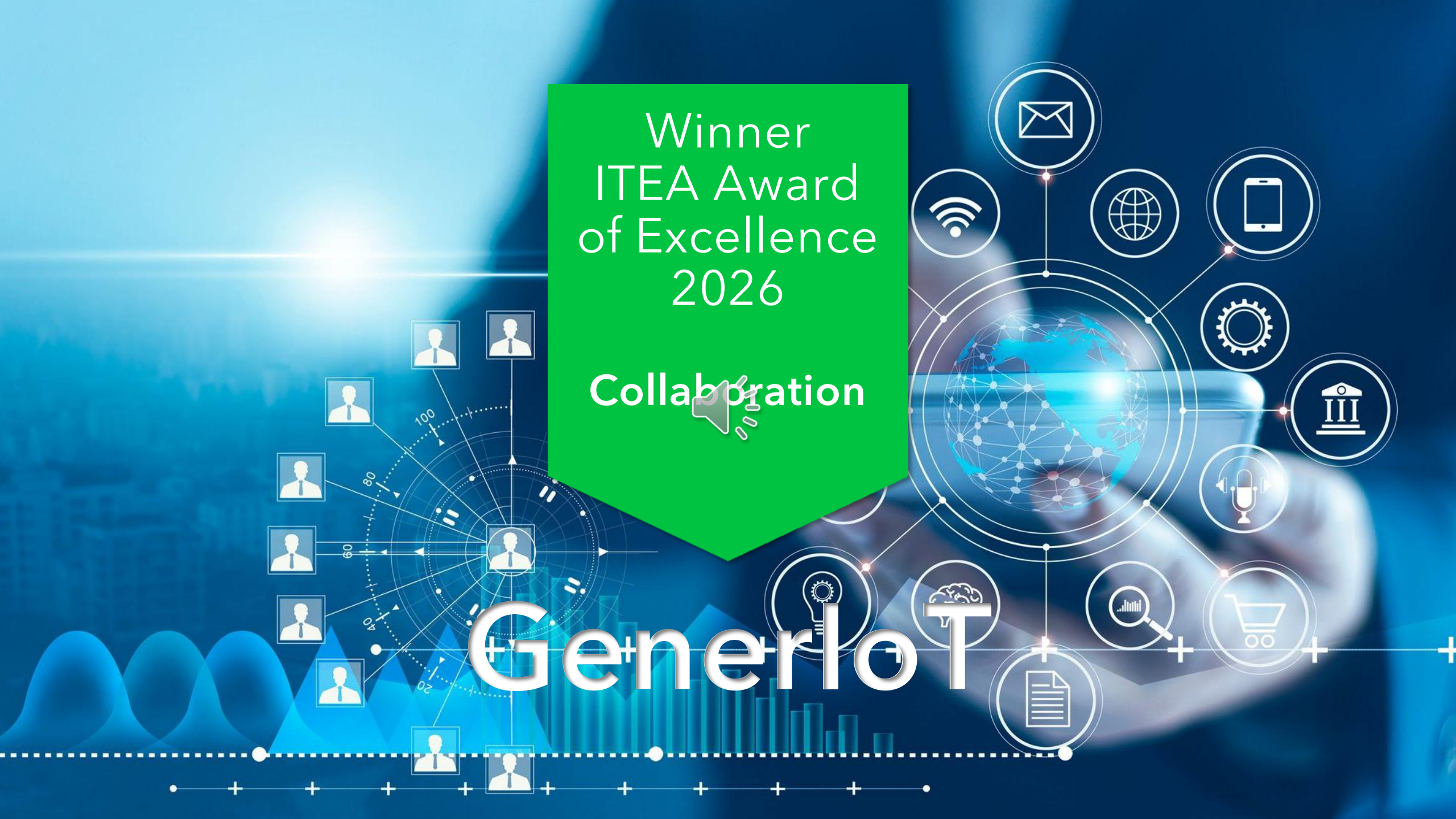
GenerioT



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Collaboration

GenerioT



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GenerloT

ITEA Award of Excellence 2026 ceremony 'Collaboration'

15 September 2026

Wolfgang Ecker, Infineon Technologies



GenerIoT

Project data

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This project has received funding from:



With funding from the:



Federal Ministry
of Research, Technology
and Space



Project duration:

Jan 2023 – April 2026

Project website:



GenerIoT

Project rationale

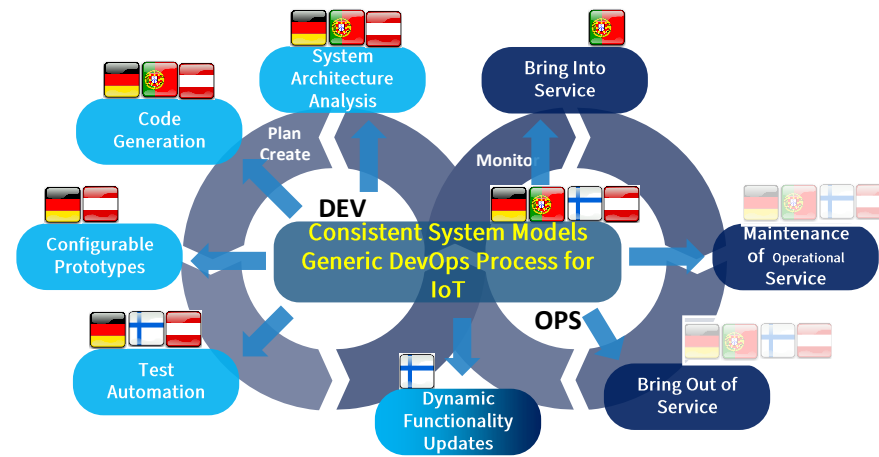
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- The **GenerIoT** project solves the complexity, high costs, and security challenges associated with developing and managing software for – but not limited to - Internet of Things (IoT) devices
- GenerIoT aims to bridge the gap between IoT development and operations by bringing automated DevOps and Model-Based Systems Engineering (MBSE) to the IoT lifecycle

GenerIoT

Collaboration & Innovation

- All partners contributed to **Modelling Innovation**
- **Broad Skills and collaborative Networks** to drive Standardisation
- **Automated Code Generation** based on MBSE and MDA, utilising SysML2.0 and supporting C and RUST
- **Significant Time and Cost Savings** by cooperation in standardising and streamlining generation, deployment, and field management
- Supporting the **IoT DevOps lifecycle**, from system modelling (using e.g. IoT-PML) to secure, in-field updates

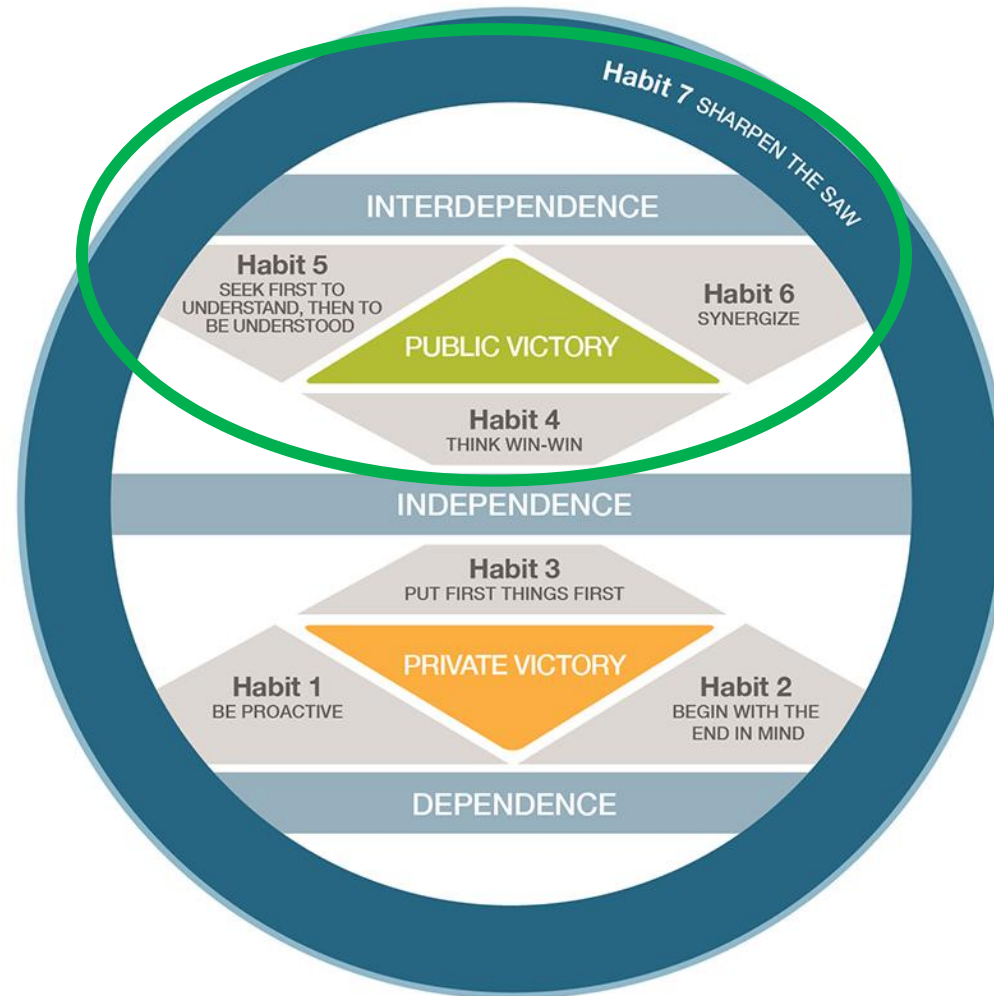


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GenerIoT

Advice to (future) ITEA project partners

- *Follow the 7 habits of highly effective people – especial the **public** ones targeting cooperation*
- Focus on results; the deliverables will follow
- Value the lightweight European R&I projects
- Cooperate with ITEA and Authorities as with friends



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GenerIoT

Contact details

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Exceptional
Excellence

SYMPHONY



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SYMPHONY

ITEA Award of Excellence 2026 ceremony
'Exceptional Excellence'
15 September 2026
Asli Tanriverdi



SYMPHONY

Project data

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This project has received funding from:



Project duration:

October 2022 - March 2026

Project website:



SYMPHONY

Project rationale and outcome highlights

SYMPHONY tackled fragmented healthcare data by building open, interoperable, disease-specific ecosystems that deliver the right information at the right time.

■ Major outcomes

- 4 clinical ecosystems for prostate cancer, aortic aneurysm, atrial fibrillation and multiple sclerosis, all built on one reusable, open reference architecture.
- Multiple market-ready solutions, including Philips' FDA-cleared & CE-marked AV Vascular application, Cambio's European University Hospital Alliance rollout, AICRUM CareMe at Home SaaS, and Cuviva Remote Patient Monitoring SaaS.
- Public white paper "Building the Foundations for Standardized Clinical AI" – the SYMPHONY blueprint

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Public white paper



SYMPHONY

Project Impact

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- Paper based prostate cancer workflow already replaced by SYMPHONY end-to-end digitised workflow in Karolinska University Hospital. Other use cases are following.
- Overall, 10% improvement in workflow duplication reduction, 50% automated risk scoring and >15% improvement in secondary data use*.
- Major contributions to openEHR prostate-cancer standardisation and extensive implementation feedback for IHE AI workflow profiles, DICOM, and FHIR.

* Measured non-clinically in selected samples.



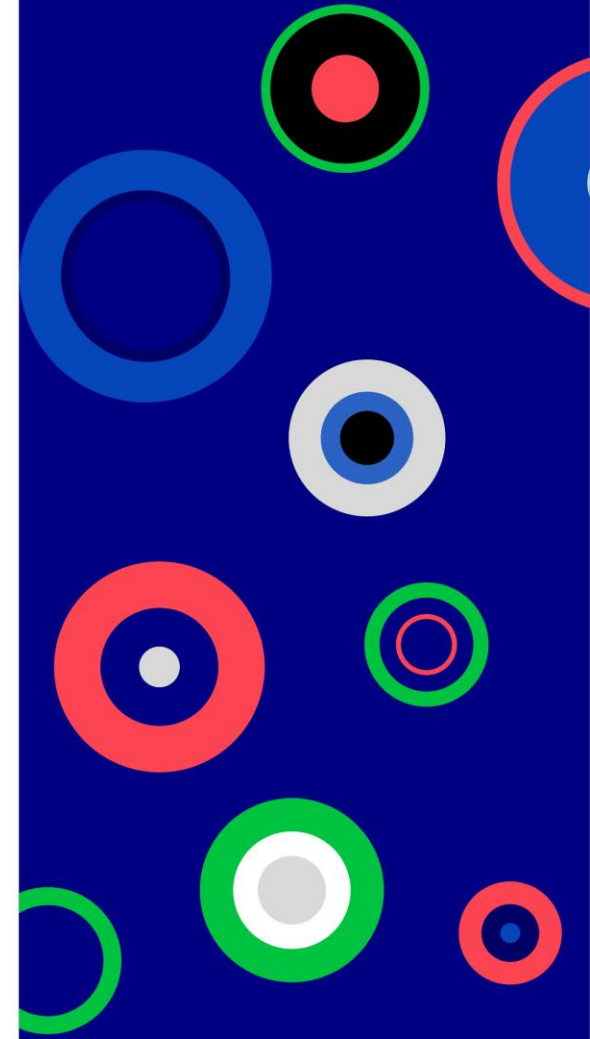
SYMPHONY

Future outlook

From validated demonstrators to real-world impact, progressing toward deployment, wider adoption and continued standardisation.

■ What is next

- Patient-facing deployment of all the use case solutions.
- Commercial rollout of majority of SYMPHONY innovations
- Expansion to new AI-enabled workflows through reuse of the SYMPHONY architecture.
- Continued leadership in healthcare standards through openEHR, FHIR, DICOM and IHE.
- The white paper remains a public reference for building interoperable clinical-AI platforms.

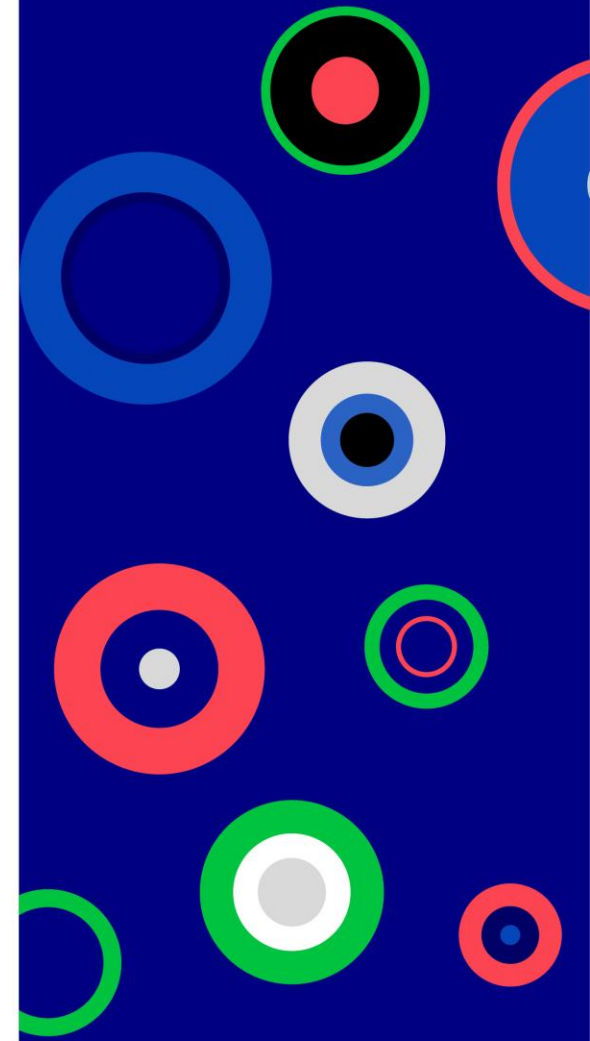


SYMPHONY

Advice to (future) ITEA project partners

Build ecosystems, not prototypes. The strongest SYMPHONY outcomes came from aligning clinical pathways, architecture, standards, data, AI and partners around a shared vision.

- Key lessons:
 - Start with clinical pathways, not technology.
 - Define architecture and standards early.
 - Design once, reuse across use cases.
 - Plan exploitation from day one.
 - Stay flexible and support each other.



SYMPHONY

Contact details

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Congratulations to all 2026 ITEA Award of Excellence winners!

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