Key facts:

Call: »SNS Large Scale Trials and Pilots (LST&Ps) with Verticals« (6GSNS Stream D)

Project runtime: 1.1.2023 – 30.06.2025

Project costs: €14,509,491.25

Requested EU contribution: €13,162,555.38
FSTP funding: €6,000,000.00

Our Objective:

Accelerating the digital transformation of key verticals
- energy,
- construction,
- automotive, and
- manufacturing

using large-scale trials in multiple testbeds, evaluating 5G/6G technologies such as
- real-time communication,
- localization,
- self-description,
- digital twinning, and
- sensor-network data fusion

methodologically with KPIs and KVIs.
Partner overview

Coordinator: Fraunhofer IPT

Technology: Ericsson Germany, Ericsson Turkey, Neutroon, Fivecomm, Qualcomm

Research: Fraunhofer IPT, RWTH-ACS, RWTH-WZL, RWTH-IP, I2CAT

Verticals:

<table>
<thead>
<tr>
<th>Energy</th>
<th>Manufacturing</th>
<th>Automotive</th>
<th>Construction</th>
</tr>
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<tbody>
<tr>
<td>RWTH-ACS</td>
<td>Marposs Spa</td>
<td>IDIADA Automotive Technology</td>
<td>Center Construction Robotics</td>
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<td>Automation of Complex Power Systems</td>
<td>Marposs Monitoring Solutions</td>
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<td>RWTH-IP</td>
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<tr>
<td>RWTH –WZL Laboratory for Machine Tools and Production Engineering</td>
<td>Mitsubishi Electric Europe</td>
<td>I2CAT</td>
<td>Individualized Production</td>
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<td>Fraunhofer IPT</td>
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</tbody>
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Financial Support for Third Parties: FundingBox Accelerator, FundingBox Communities
Our Testbeds

- 5G for energy monitoring
- 5G for mobile robotics
- 5G for cloud native production
- 5G for construction

At the 5G-Industry Campus Europe, Aachen (Germany)

- 5G for automotive driving

IDIADA test track, Tarragona (Spain)
Overall concept of TARGET-X
Testbeds for Energy, Manufacturing, Construction, Automotive – Work packages 2 - 5

- Broaden the exposure of 5G by onboarding new verticals
- Increase learnings on needs of new verticals
- Identify synergies

5G integration in new verticals

- 5G for energy monitoring: ACS testbed at the 5G-ICE, Aachen (DE)
- 5G for mobile robotics: WZL testbed at the 5G-ICE, Aachen (DE)
- 5G for cloud native production: IPT testbed at the 5G-ICE, Aachen (DE)
- 5G for construction: Construction site at the 5G-ICE, Aachen (DE)
- 5G for automotive driving: IDIADA test track, Tarragona (ES)
Overall concept of TARGET-X
KPIs, KVIs and business models – WP1 Methodological Assessment Framework

KPIs, KVIs and business models

- Derive KPIs and KVIs for 5G/6G development
- Allow for methodological assessment

5G integration in new verticals

- 5G for energy monitoring
- 5G for mobile robotics
- 5G for cloud native production
- 5G for construction
- 5G for automotive driving

- ACS testbed at the 5G-ICE, Aachen (DE)
- WZL testbed at the 5G-ICE, Aachen (DE)
- IPT testbed at the 5G-ICE, Aachen (DE)
- Construction site at the 5G-ICE, Aachen (DE)
- IDIADA test track, Tarragona (ES)
Overall concept of TARGET-X
New 5G/6G Features - WP6 Technology evolution

KPIs, KVIs and business models

5G for energy monitoring
5G for mobile robotics
5G for cloud native production
5G for construction
5G for automotive driving

5G integration in new verticals

ACS testbed at the 5G-ICE, Aachen (DE)
WZL testbed at the 5G-ICE, Aachen (DE)
IPT testbed at the 5G-ICE, Aachen (DE)
Construction site at the 5G-ICE, Aachen (DE)
IDIADA test track, Tarragona (ES)

- In-depth study and use of key beyond 5G features
- Tighten interworking between devices, NW and services

New 5G/6G features
TARGET-X believes in cascade funding

WP7 – Open calls and FSTP

- Prototyping Beyond 5G Features
  First implementations of Beyond 5G and 6G Features for **Proof of Concept**

- Defining new requirements
  New requirements and use cases for the 5G and 6G development

- **Joint efforts**

- Regular Funding
- Cascaded Funding

**TARGET-X**

**FSTP**

**Consortium**

**Bringing into the Industry**

using the prototypes to implement technology **ready for industrial usage**

Apply for first round of open calls: May-July 23
Overall concept of TARGET-X

FTSP projects: innovation driver

KPIs, KVIs and business models

5G integration in new verticals

New 5G/6G features

- ACS testbed at the 5G-ICE, Aachen (DE)
- WZL testbed at the 5G-ICE, Aachen (DE)
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- 5G for energy monitoring
- 5G for mobile robotics
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- 5G for automotive driving

5G for energy monitoring
5G for mobile robotics
5G for cloud native production
5G for construction
5G for automotive driving
Thank you for your attention!

Contact

Niels König, Fraunhofer IPT
TARGET-X Coordinator

Janina Knußmann, Fraunhofer IPT
TARGET-X Project Management

Email: contact.target-x@ipt.fraunhofer.de

Coming soon:
www.target-x.eu

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