



**NEXT GENERATION INTERNET
IS OUR CHALLENGE**



1st ITALIAN RESEARCH INSTITUTE

Top research institute in Italy, ranked
at the 1st place for scientific excellence and for
the economic and social impact (ANVUR).

230
scientific
publications

250
contributions in conferences
and scientific publication

+100
scientific
events organized



WE BELIEVE IN A FUTURE BUILT ON KNOWLEDGE

FBK's mission is **excellence of science**
which extend our innovation capability
and involve the community and the
economy in the circulation of knowledge
and technologies (impact).

+100 **7**
PhD students research centers
+400
researchers



INTERNATIONAL IMPACT

101
EU projects
in 2016

42 **20**
patents innovative
startups

FBK works with **international big industries**
as main partner for **research & development**
projects but also as a key player for their
innovation focused projects.

We understand better the needs of the
market, and companies can introduce
innovation faster in their product cycle.



NEXT GENERATION INTERNET

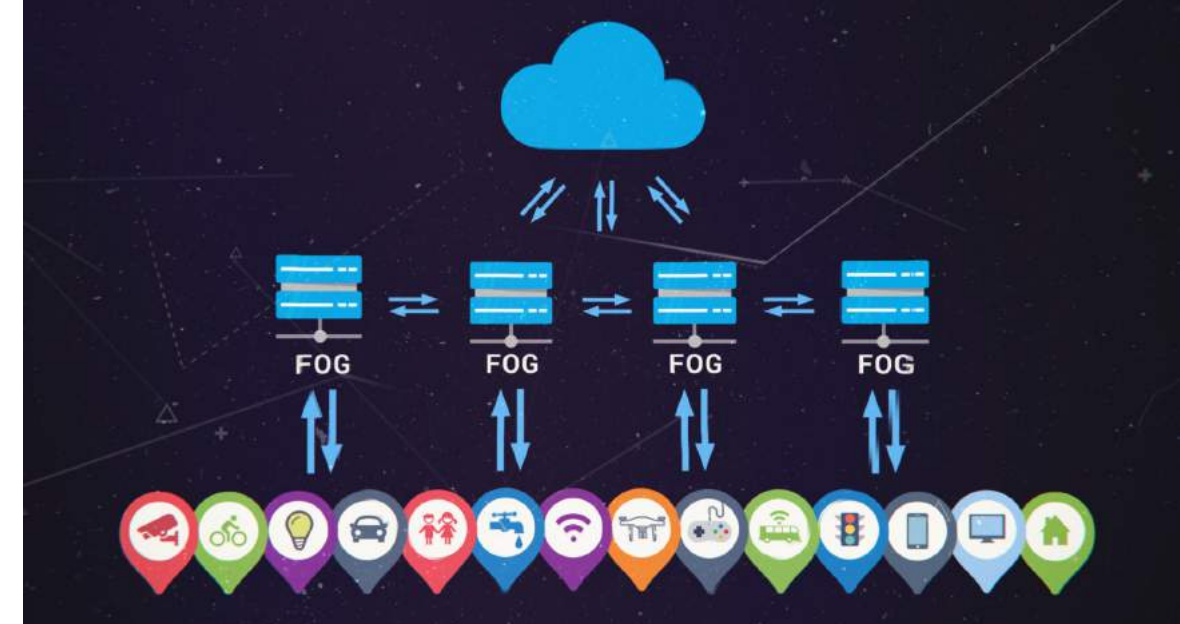
free, open and more interoperable Internet

FBK is driving the ongoing technological revolution toward a **human-centric Next Generation Internet (NGI)**, by demonstrating how innovative solutions like **IoT, 5G and fog computing** empowered with **Artificial Intelligence** could enable groundbreaking scenarios in vertical sectors like **smart city, smart mobility, smart industry and smart agriculture**.



OpenIoT

The OpenIoT Unit's objectives focus on **gaining leading knowledge** on supporting and rapidly building innovative, standard-based and **interoperable IoT-based solutions**. Our **decentralised technology assets** are used to support **smart land, industrial IoT and eHealth** monitoring applications.



RiSING

The **Robust and Secure Distributed Computing** research unit investigates and implements **smart, autonomic** and anti-fragile methods and **platforms to enhance resiliency**, dependability and **security of cloud and fog computing** infrastructures. Our motto: *Simplify and secure life on the edges*.

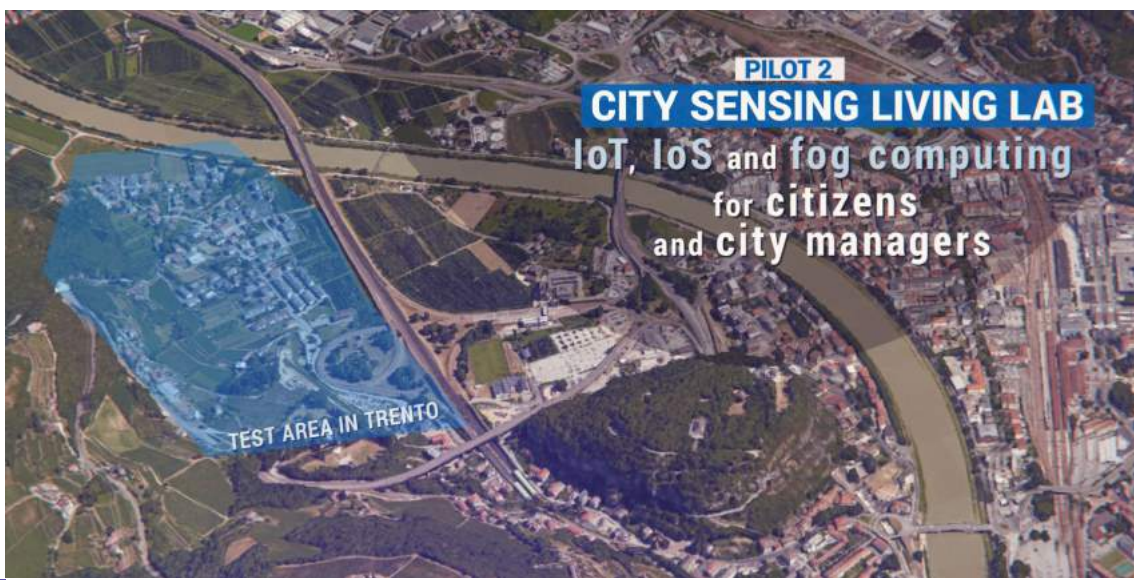
RESEARCH UNITS

PILOT 1: MUNICH-BOLOGNA 5G CORRIDOR

With a vision for a world of **connected cars** for enhancing the mobility experience of people, FBK is engaged in an **European-wide initiative** to demonstrate the seamless

on the **roads of the future**, by leveraging 5G Radio Access, Edge Cloud and Artificial Intelligence technologies.

600 km
3 countries
15 partners



PILOT 2: CITY SENSING LIVING LAB

IoT, IoS and fog computing for citizens and city managers

PILOT 2: CITY SENSING LIVING LAB

With the goal to **improve quality of life** and offer innovative digital services to citizens, FBK is joining forces with the municipality of Trento to operate a **living laboratory** where research and experimentation combine **Internet of Things**,

fog computing and **Internet of Services** with the needs of the population.

1184 citizens
652 users
164 buildings

Smart Cities and Communities

We are a **community of researchers, engineers and citizens** engaged in the design, development and adoption of an ICT platform to improve **sustainability** of the territory, **quality of life** of citizens, and **efficiency** of the public administration. Our focus: a **living lab** to test a full stack of technologies and methodologies to face the **societal challenges** of **Smart Cities**.



WiN

The **Wireless and Networked Systems** research unit focuses on the analysis, design and development of software-centric programmable network solutions with a strict emphasis on **5G network** design requirements. Our main priorities include **software-defined RAN, MEC** and **lightweight management and orchestration**.



5G