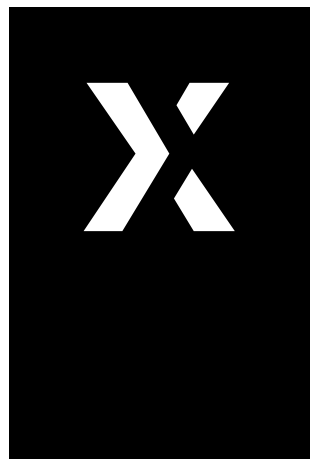


R&D
NEXTWORKS
 HEADING THE FUTURE



Base

Pisa

Ideal location for development of advanced technologies, maintaining excellent links with local academia.

Headquarters

Pisa

Branch office

Rome

Established
 2002

Core team with 20 years of experience in ICT, telecommunications, control & automation

R&D Expenditure
 ~20%

The time gap between technological innovation and obsolescence is narrowing, so it's mandatory to invest in research and innovation

R&D HIGHLIGHTS



80+
Projects funded since 2006

Large number of software prototypes for network control and management, edge/cloud and IoT platforms, deployed in 20+ EU labs and testbeds

40+ recognized innovations in EU innovation radar

15+ participation in EU large-scale trials and pilots with multi-sector verticals

60+ demonstrations in top-ranked conferences and industrial events

NEXTWORKS
HEADING THE FUTURE

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SCAN TO SEE NEXTWORKS WEBSITE

**Telco
Cloud
Edge**

NEXTWORKS
R&D DEPARTMENT

6G

Verticals

**AI/ML
AIOps
LLM**

IoT

**Cyber
Security**

RESEARCH AND INNOVATION AREAS



NETWORK CONTROL AND MANAGEMENT

SDN/NFV

Control planes for optical networks, TSN, and multi-technology domains

5G slicing Orchestration for cloud-native 6G, NTN integration

Non Public Networks

AI-driven network automation

Network API and exposure

CYBERSECURITY

QKD

VNFs for security

Security orchestration

SecDevOps

CLOUD COMPUTING

Computing and network virtualization

SDN/NFV for datacenters Resource orchestration in edge/cloud continuum

Integrated IoT, device, edge/cloud platform

Telco Edge Cloud

ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

Large Language Models

Trusworthy AI

DataOps, MLOps, AIOps

AI-as-a-Service

VERTICAL TRIALS & PILOTS

Experimentation platform for 5G

DevOps and experiment for 6G

Testing automation and 5G KPI

Testing-as-a-service and 6G KPI/KVI

Network Applications for smart cities and buildings, media, automotive, Industry 4.0, energy, transport & logistics, public safety, smart agriculture

2016/2020

2021/2025

2026/2030

NEXTWORKS

OUR KNOW-HOW SERVICES

TRAINING

Expert-level training on 5G/6G and Telco Cloud architecture and tools

Training service on 5G/6G and Telco Cloud architectures, ZSM, SDN/NFV, MEC, CAPIF/CAMARA solutions and related software tools

SOFTWARE SOLUTIONS

Network solutions: design, development and support to I&V

Highly tailored solutions for embedded/carrier grade components at kernel and user-space (various OS), medium/large-scale distributed systems, carrier-grade/fault-tolerant solutions, full protocol stacks for IoT and telco equipment

Cloud-native IoT solution design and development

Advanced cloud-native IoT control solutions for: Smart Homes & Buildings, Smart Factories, Energy monitoring and optimization, Data Analytics distributed at edge/cloud for AI/ML-based predictions and optimizations

CONSULTANCY

Senior Network Architect

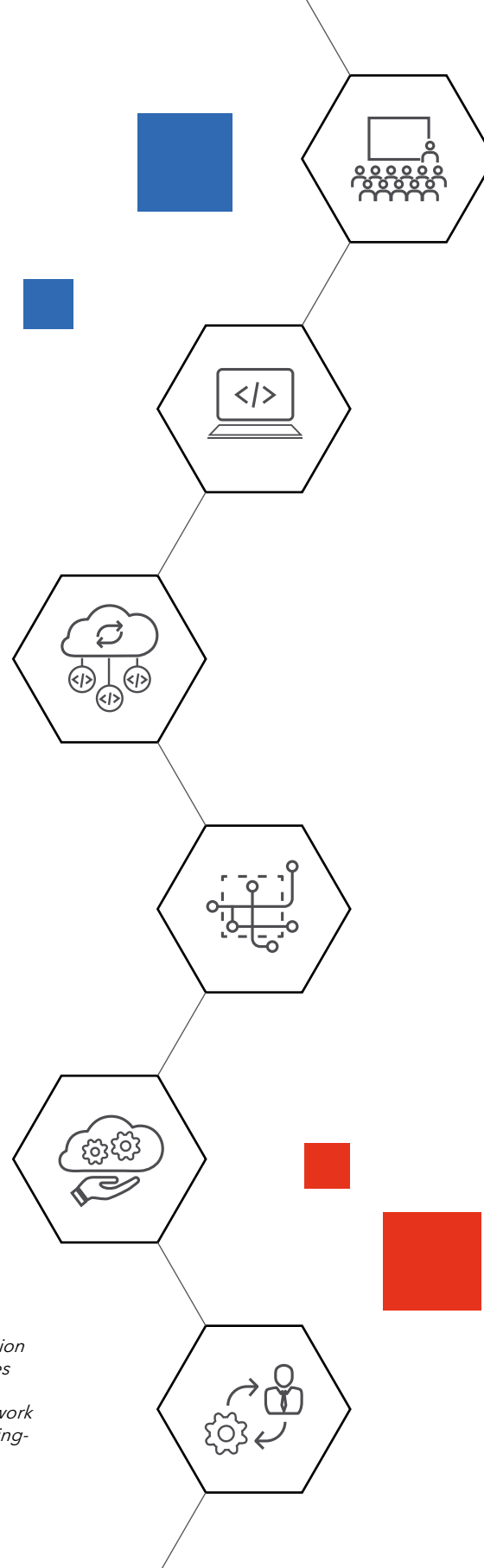
Experienced professional profiles for design, dimensioning and continuous improvements of edge and cloud-native private/public infrastructures, PoCs and production services in large multi-site networks and datacenters

Senior Service Architect

Experienced professional profiles for operative procedures for design, delivery and management of infrastructures, services and DevOps, ensuring business continuity and HA, with integrated test methodology and reporting

Technical Project Management

Support delivery of complex platforms through coordination of multi-national teams, managing procurement processes (requirements, tender definition, proposal evaluation, selection of suppliers), deployment and operation of network and edge/cloud infrastructures, vertical applications, cutting-edge R&I PoCs and production services



KEY ASSETS & ACHIEVEMENTS

Telco Edge Cloud, 5G/6G Management & Orchestration, AI/ML prototypes

Service and network orchestrators, AI-driven automation frameworks, edge/cloud resource orchestrators, multi-technology access and transport network controllers, distributed monitoring platforms, AI/MLOps platform, network exposure framework, catalogues and marketplace.

IoT-related and Smart-Everything development activities and assets

Home and building control/automation, Energy management and optimization with policies and predictors, Media applications, Real-time monitoring & event management, Cloud-based IoT services (e.g. based on MS Azure or AWS Stream Analytics and Machine Learning), Remote facility management & supervision, Automotive, Transport & Logistic services.

Contribution to 5G/6G, NFV, MEC, IoT and Smart Factory R&D in Europe

ETSI ZSM, NFV, MEC, ENI Industry Study Groups, ETSI OSM, TeraFlowSDN, and OpenCAPIF Software Development Groups.

ETSI Specialist and Testing Task Forces for NFV and MEC API Conformance Test Suites, NFV and MEC OpenAPIs, and MEC/OneM2M integration.

Member of the Governing Board of 6G IA

Vice-chair of the Steering Board of NetworldEurope European Technology Platform

Vice-chair of the SME WG of NetworldEurope

Member of AIOTI (Alliance for Internet of Things Innovation)

R&D projects with top-tier international teams

33 projects in Horizon 2020 (17 in 5G PPP, 1 on 6G), 5 ESA ARTES projects, 1 EDIDP project, 18 projects in Horizon Europe.

Contributions to international top conferences and exhibitions (MWC, 5G World Forum, OFC, EUCNC, GLOBECOM, ECOC, ICC, IoT Solutions World Congress, etc.).

A wide network of contacts

Collaborations with major network vendors and telcos in Europe, IoT players and utility providers, research centers and universities in Europe and worldwide



HEADING THE FUTURE