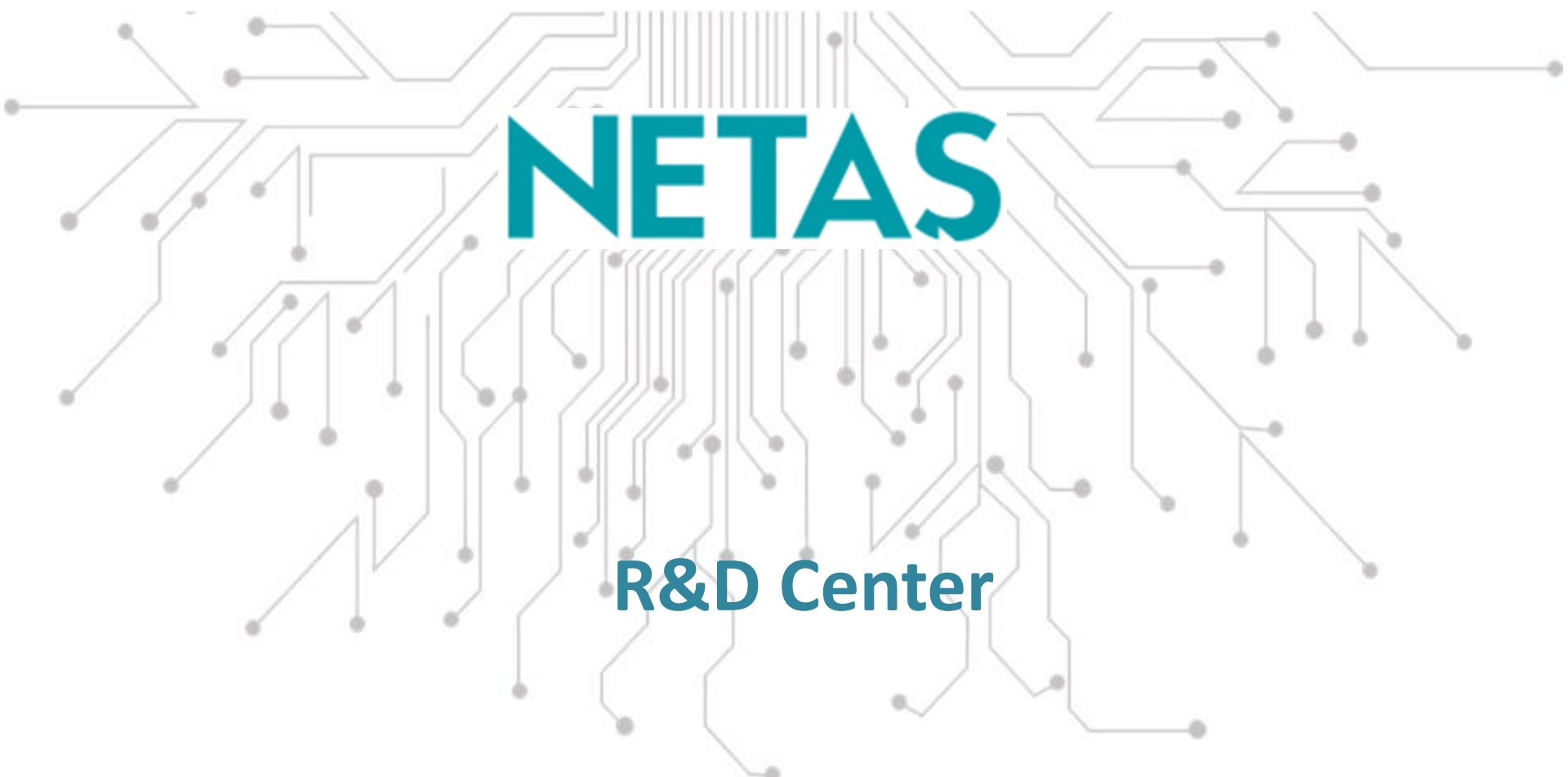


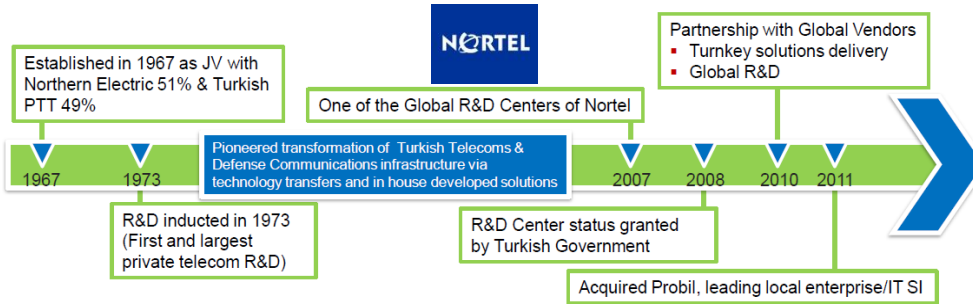


NETAS

R&D Center

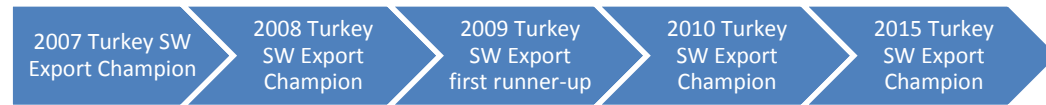


Who We Are?



- **48 years experience**, first and largest private telecom R&D in Turkey
- Develops ICT software solutions for **more than 200 global operator**
- An **R&D Center** announced by government and supported by Turkish incentive programs

- Turkey's **software export champion** (30 M\$ / yr software export)



- **750+** highly qualified R&D engineers
 - Electronic Computer and Telecom Engineers
 - 25% with MSc & PhD
- **2200+** employees

- Strong relations with **more than 25** main Turkish Universities
 - 8 collaborative projects** with METU, Bosphorus, ITU and Özyeğin
 - Over 20 thesis projects** completed at **10 universities** with mentoring



- Scientific Articles
 - 13 in 2013, 3 Journal paper & 10 conference preceedings
 - 17 in 2014, 2 Journal paper & 15 conference preceedings
 - 35 in 2015, 8 Journal paper & 27 conference preceedings**



- **First runner-up of ICT sector** in Turkey's patent classification @2013
- **Over 70** yearly patent applications

The pioneer of software export
with Turkey's biggest VoIP R&D

- High quality, best class SW R&D for 40+ yrs to multinational companies



Local custom product
and solution design for



International
R&D

World-class 100%
product design for



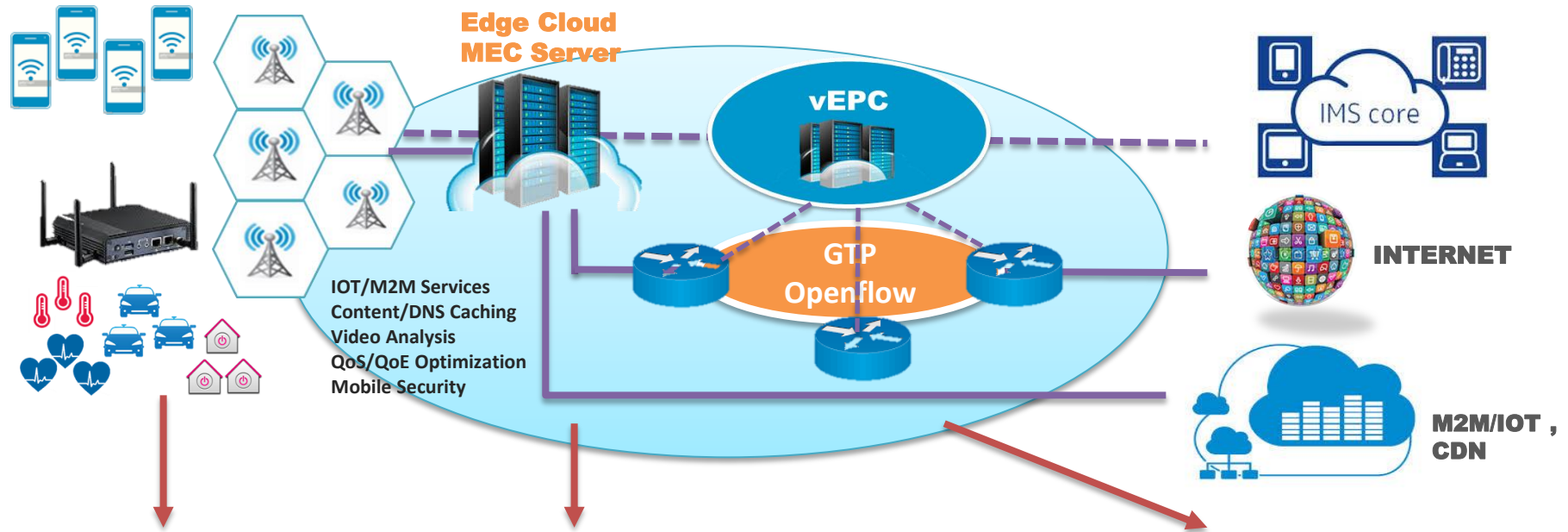
ICT
R&D

Defense
R&D

Technology Services Offering



Netaş 5G Projects



M2M/IOT Gateway

- Hyperconnectivity beyond distinct systems
- Enables common M2M services
- Value added services across ecosystems

Mobile Edge Computing

- Edge platform for mobile data processing
- QoS and QoE optimization
- Network slicing

Virtualized SDMN EPC

- Virtualized EPC functions
- Decomposed control and user planes
- GTP Open Flow for user plane control

Technology center with E2E 4G solutions laboratory

R&D Experiences



Multimedia and VoIP technologies (with **Nortel Networks** for **38 years**, with **GENBAND** since **2011**)
(PSTN switches, SIP PBX Integration, SDH, IPTV, IMS) for **Nortel Networks**
(Call Session Controllers: Continuum (C20, C3), Safari CPC, Multimedia App. Server: Experius) for **Genband**



Cloud networking



Web and mobile networks applications,
Web RTC: SPiDR for **Genband**
Soft client as a messaging service for **Turkcell**



Virtualization for **GENBAND**



Cyber-Security

VoIP security: SIP firewall, Web App. Firewall and Web Vulnerability Detection, End to end Media Security,
M2M Security, Malware Detection and Cloud Network Security



4G-LTE technology

Turkey's first 4G-LTE base station (Project size: **10 M€**, Consortium project with **Aselsan** and **Argela**)



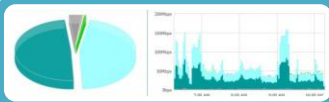
M2M

Automatic Meter Reading Project (Smart grid M2M project)



E-Government, E-Ticket and Big Data, Business Intelligence

Turkish Football Federation E-Ticket Project, XML Gateway & KEK, E-Government Project



IP traffic monitoring

Loupe, Soft Client **NETAŞ TIC**



GSM/GSM-R core network developments for **Kapsch**

NETAS Contacts

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THANK YOU