5G

Orchestrating the 5G - Connected Future with NEC

5G is the New Reality

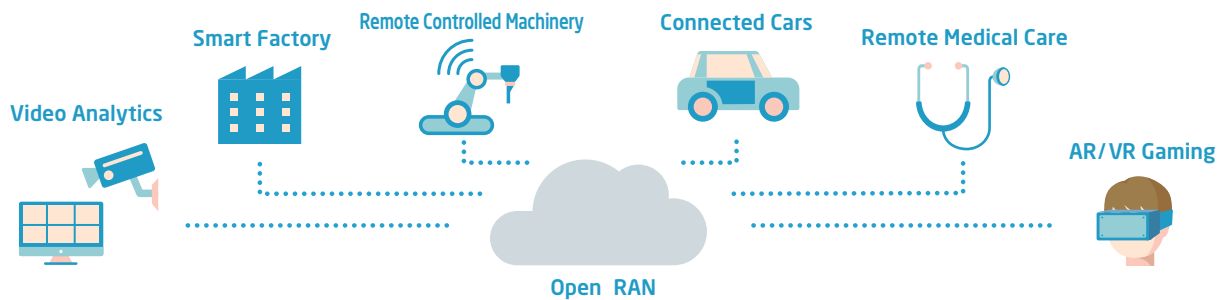### As of August 2020 there are **92** Live 5G Networks in **38** Countries [1]

The Global Mobile Industry is Embracing Open RAN to Drive Innovation

Telcos around the world are quickly moving towards Open RAN for their 5G deployments as it allows them to avoid vendor lock-in, brings new innovation and a best-of-breed approach to different network components for the first time by sourcing multiple vendors.

Strong Industry Momentum & Support

According to Heavy Reading, 62% of CSPs believe that Open RAN will be critical or important over the next 2 years [2]

There are now 22 confirmed global Open RAN deployments representing 1.2bn potential subscribers [3]

Video Analytics

Smart Factory

Remote Controlled Machinery

Connected Cars

Remote Medical Care

AR / VR Gaming

Open RAN

Challenges for Communication Service Providers (CSPs)

The 5G era will require CSPs to innovate across the entire service ecosystem.
Key challenges to overcome include:

1
Accomodating increased traffic demand due to more connected devices and new usage patterns.
By 2025 5G smartphone users are expected to consume 100GB per month [4]

2
Delivering more value to end users by improving user experience.
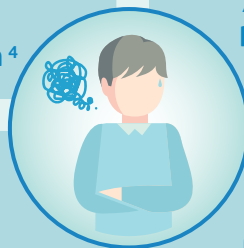71% of manufacturers are willing to pay more for 5G connectivity [5]

3
Creating new business models and revenue streams.
eMBB, FWA & XR are viewed as key new and improved 5G services [6]

4
Efficiently replacing and upgrading legacy networks.
CSPs will invest US$858bn in 5G networks by 2025 [7]

1 https://gsacom.com/technology/5g/   2 https://www.lightreading.com/lg_redirect.asp?piddl_lgid_docid=758034
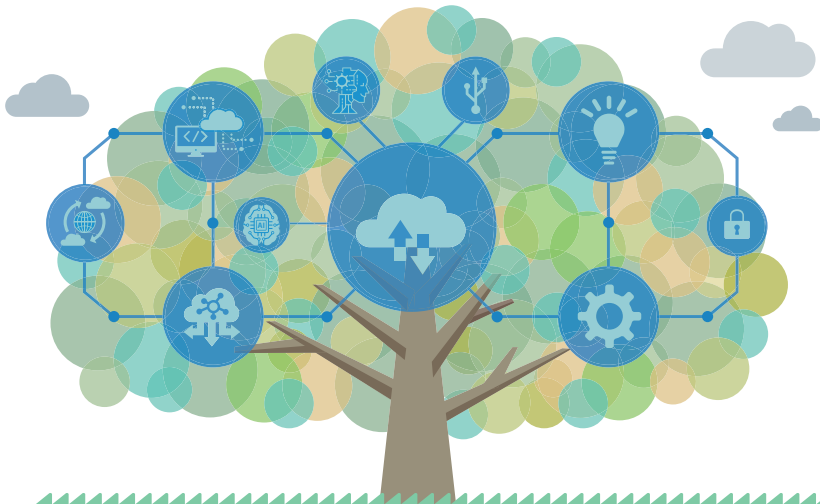3 https://www.businesswire.com/news/home/20200220005795/en/O-RAN-Alliance-Continues-Grow-Global-Operators-Suppliers
4 https://5g.co.uk/news/video-streaming-and-faster-5g-speeds-data-usage-surge/4274/   5 https://inform.tmforum.org/research-reports/5g-future-targeting-the-enterprise/
6 https://inform.tmforum.org/research-reports/5g-future-business-models-for-monetization/
7 https://www.gsma.com/mobileeconomy/wp-content/uploads/2020/03/GSMA_MobileEconomy2020_Global.pdf

NEC's 5G Vision – An Open Ecosystem Approach

NEC takes an "Open Ecosystem" approach to 5G network deployments, offering end-to-end solutions via our partners' best-of-breed components for 5G Standalone service.

5G Standalone architecture unlocks the full potential of 5G by enabling massive Machine Type Communication, Ultra Reliable Low Latency Communications and enhanced Mobile Broadband as an extension of 4G LTE technology.

Why NEC ?

NEC can deliver end-to-end 5G network solutions via our open ecosystem.
Our CSP customers benefit from our global ICT expertise and experience in the following areas

NEC's Competencies

An open ecosystem approach with a diversified and trusted supply chain

Open RAN architecture to increase the flexibility of deployment scenarios and simplified operations

SI capabilities to orchestrate and reduce integration complexity with multi-vendor components

Customer Benefits

Diversified supply chain & no vendor lock-in

Flexible network design, deployment and operation

Innovate the user experience

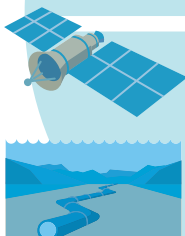Reduced time-to-market

NEC. Your Trusted Partner in 5G

IT and network expertise in virtualization technology & networking

Radio Unit and IOT interoperability testing skills

Strong global footprint with leading CSPs

A wide range of business deployment expertise with advanced technologies spanning from submarine cables to satellite systems far beyond the capabilities of most network vendors

Deep experience in the telecom industry via deployments for Tier-1 operators such as NTT DOCOMO and Rakuten Mobile

Global partnerships with multiple industry-leading technology vendors

Learn more at www.nec.com/5g/