

Open RAN India 2021 Virtual Conference

Inaugural Theme: The Impact of Open RAN on the Telecoms Ecosystem
Session Time: 10:00 – 11:45 hrs
Presentation Time: 10 Minutes

Telefonica

Open RAN at Telefónica Germany

June 17th, 2021

Matthias Sauder, Director Mobile Access Networks



Telefónica worldwide



43

43 billion euros Revenue in 2020



345

345 million customers worldwide in 2020



10

One of the 10 largest telecommunications companies in the world



113,000

More than 113,000 employees in 2020



12

With operations in 12 countries worldwide

Telefónica Germany



44.4

Million mobile network customers*



8.200

employees 2020



2.3

Million broadband lines*



7.5

billion euros revenue 2020

Telefónica

* Consolidated figure for the Telefónica Deutschland Group as of 31 March 2021, access numbers

Latest Awards



CHIP
gut
Test: Mobilfunknetze
CHIP 01/2020
O₂
Unabhängige Tests seit 1978
chip.de/Netztest

2019
STEVIE
SILVER
WINNER
GERMAN
STEVIE AWARDS

connect
SEHR GUT
MOBILFUNK-
NETZTEST
O₂
Heft 1/2021
www.connect.de

Bester
Mobilfunkanbieter
Telecom Handel
LESERWAHL
2020

E.A.Z.-INSTITUT
Deutschlands
Innovations-
führer
33.000 untersuchte
Unternehmen
03 | 2019
www.faz.net/innovationsfuehrer

connect
TESTSIEGER
SERVICE-APPS DER
NETZBETREIBER
O₂
Heft 11/2020
www.connect.de

funkschau
19
Produkt
des
Jahres
Telefónica
Kite Plattform

WirtschaftsWoche
Kundenservice
Mobilfunkanbieter
SEHR GUT
2019
O₂
Privatkunden
Im Vergleich: 18 Mobilfunkanbieter
Ausgabe 45/2019
DKI

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TESTSIEGER
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O₂
Heft 10/2020

2019
STEVIE
GOLD
WINNER
GERMAN
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SEHR GUT
FESTNETZTEST
BUNDESWEITE ANBIETER
O₂
Heft 8/2020

Computer
Bild
**LESER-
TEST**
O₂ TV
Gesamtwertung der Leser:
4,5 von max. 5 Sternen

PC Magazin
Mobilfunktarife-Test
TESTSIEGER
O₂ Free M
www.pc-magazin.de 11/2019

Smartphone
DIE GRÖSSTE HANDY- UND KAUFBERATUNGSMAGAZIN
PREIS-
LEISTUNGSSIEGER
NETZTEST 2020
O₂

December 14th 2020 1st O-RAN site On Air in Germany

Open RAN vendors map for the Telefónica Germany pilot

RAN Software



RRU



Virtualization Environment



Fronthaul/Midhaul Switch (DCSG) – HW - SW



Hardware (BBU/CU/DU)



Chipsets



System integrator



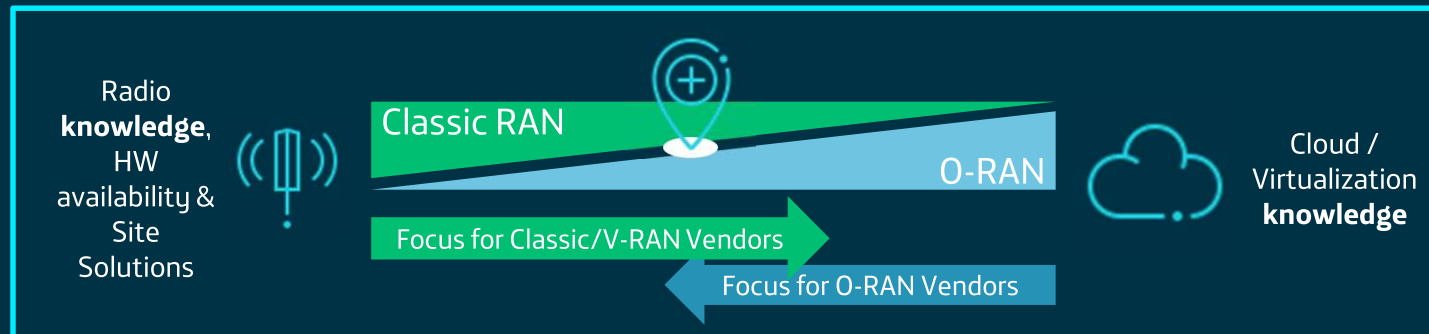
Open does not mean just plug and play



- With open RAN tasks like selection of server hardware, virtualization software, etc. and the related interoperability tests are the task of the operator or the system integrator.
- Even if the interfaces are open adaptations needed to be done – **with time and a growing market this will be solved** but now the introduction of new HW needs explicit, timely adaptation by the RAN software vendor.
- With the virtualization a very powerful eco system will be established.
- Far more than just single site optimization will be possible and long awaited traffic steering between sites in (near) real time RIC will be reality soon.
- The skill set from operator side will shift from pure radio, transport and IP knowledge to IT processes and fast implementation.

V-RAN maybe is a bridge to Virtualization for existing operators

- Classical RAN vendors have full blown portfolio of solutions optimized to performance, power consumption and foot print.
- First “virtual” products for V-RAN are showing up and attract by their virtualization but w/o open interfaces.
- If open API can be established this could become an alternative or at least the bridge for existing operators who are not willing the exchange the whole network with thousand of sites to open RAN over night.
- Open RAN vendors lack on availability of a full spectrum coverage with competitive hardware but the first products are very promising.
- A full blown site with low band (700 - 900MHz), mid band (1800 - 2100MHz) and high band (2600-3500MHz) plus mmWave is from footprint point of view not competitive.
- Even with this the Orchestrator is looking promising to enter a new level of service for the customer



Further information and news can be found here:



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basecamp.digital/



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telefonica.de/social-media-profile.html

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Your questions



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