



ERICSSON

5G REPRESENTS A SIGNIFICANT RADIOCOMMUNICATION EVOLUTION

PROVIDING A REVOLUTIONARY NEW PLATFORM FOR PEOPLE, BUSINESSES, INDUSTRIES, AND THE SOCIETY AS WHOLE



Lo sviluppo del 5G, Roma

March 2017

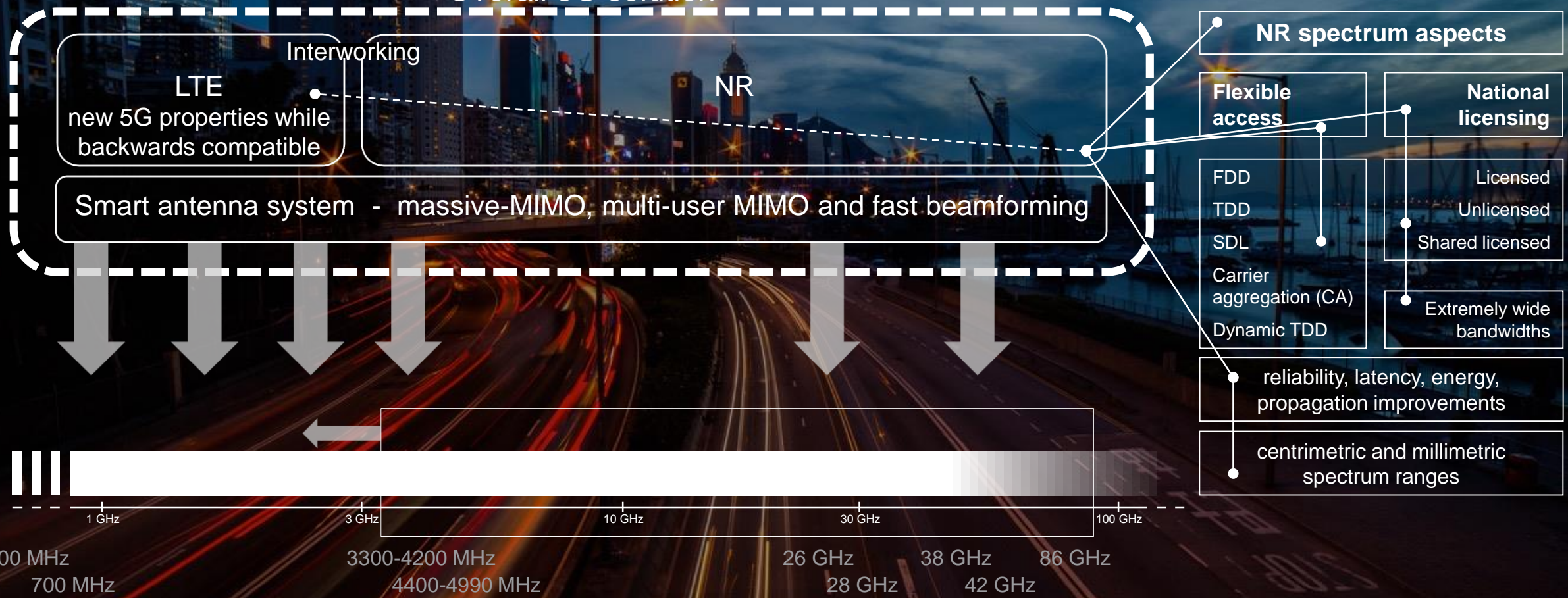
for a society under digital transformation

THE SOLUTION



including LTE and NR; for the overall 5G solution

Overall 5G solution



NR=New Radio, LTE = Long Term Evolution, FDD= Frequency Division Duplex, TDD=Time Division Duplex, SDL = Supplemental Downlink, MIMO=Multiple-Input Multiple-Output

THE SPECIFICATION EVOLUTIONS



3GPP based mobile broadband 4G and 5G technologies

LTE 4G

LTE Advanced 4G

LTE Advanced Pro 4G

LTE 5G (incl. NB-IoT)

Rel.15 (NSA) / 16 (SA)

5G NR

3GPP work on 5G is ensuring global momentum and harmony

THE RADIO EVOLUTIONS



The evolutionary challenges to future generation mobile networks means continued investments in “one” radio-based technology platform for both

- LTE 5G
- 5G NR

for tomorrow’s successful broadband services and applications

While maintaining backwards compatibility through LTE



Brings to designers the performance requirements for a new radio base station providing for low latency, improved reliability, extended range and enhanced energy efficiency

Featuring e.g. 64 transmit and 64 receive antennas enabling massive-MIMO, multi-user MIMO and fast beamforming

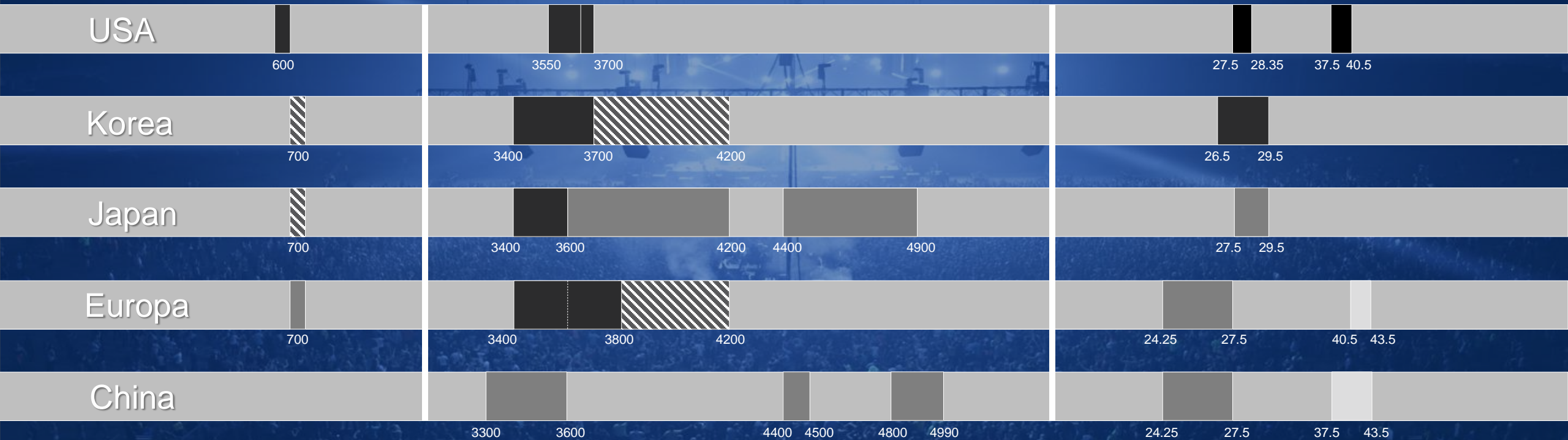
THE SPECTRUM CHALLENGE



lower bands (MHz)

mid bands (MHz)

higher bands (GHz)



5G FOR ITALY

Exploring big data, a 5G cloudification

5G for port operations

Cloud robotics for industry and agriculture

Remote diagnosis and robotic assisted surgery





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