

**Europe Mobile
Network
Infrastructure
Spending Forecast,
2017-2027: *From 3G
to LTE to 5G***

Market Study
Fourth Quarter, 2017





Europe Mobile Network Infrastructure Spending Forecast, 2017-2027: *From 3G to LTE to 5G*

Market Study

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Table of Contents

Abstract	1
Executive Summary	3
Figure A: Europe Mobile Network Infrastructure Build Spending by Generation, 2017-2027 (\$M)	4
Figure B: Europe Mobile Network Operating Costs, 2017-2027 (\$M)	5
Figure C: Total Europe Mobile Network Build and Operating Spending, 2017-2027 (\$M)	6
Figure D: Total Europe Mobile Network Build and Operating Spending, 2017-2027 (\$M, Total)	7
Methodology	8
Network Model	8
Current Model Assumptions	9
5G Model Assumptions	9
Variance from mobile operator financial disclosures	11
Basic Mobile Operator Network Architecture	12
Figure 1: Basic Components of Cellular Voice/Data Network	12
Devices	14
MIMO	14
Massive MIMO	16
Wireless Spectrum	17
Cell Sites	18
Figure 2: Typical Macrocell Site	20
Expanding cell site capacity	20
Fronthaul & Backhaul	21
Figure 3: Cell Site Backhaul Capabilities and Use Cases, Wired and Wireless	22
Mobile Network Core	22
Figure 4: Overview of the EPC	23
3GPP Releases and Standards	24
3GPP Release 11	24
3GPP Release 12	24
3GPP Release 13	26
3GPP Release 14-16	28
Carrier Aggregation	29
Figure 5: Carrier Aggregation, LTE-Advanced	30
COMP	30
Figure 6: Overview of COMP	31
ICIC and eICIC	32
Figure 7: Example of Intercell Interference	32
Figure 8: Example of Coordinated Resource Blocks via ICIC	33
Figure 9: Blanking of subframes in eICIC	34
What is 5G?	35
Potential 5G Use Cases	35

Latency	36
Figure 10: Wired Broadband Weighted Median Latency, Reported by FCC in 2016.....	37
5G Timeline	37
Figure 11: Timeline for IMT-2020 (5G)	38
Potential Requirements of 5G	39
5G Network Needs	42
Spectrum Needs	42
Challenges Along the Road to 5G	42
What will the first 5G networks look like?	43
MIMO & Beamforming	43
Figure 12: Beamforming and MIMO.....	44
Figure 13: 2x2 MIMO.....	45
MU-MIMO	47
Figure 14: Conceptual view of MU-MIMO	48
Figure 15: Another take on MU-MIMO	48
Massive MIMO and mmWave	49
Figure 16: Analog and Digital Beamforming for mmWave.....	51
Figure 17: Prototype Massive MIMO Antenna, Lund University.....	52
Figure 18: Other Massive MIMO Antenna Designs	52
Figure 19: Massive MIMO Antenna Designs / Systems	53
Beamforming	53
Figure 20: Conceptual view of Analog and Digital Beamforming	54
Figure 21: Inter-relation of Beamforming and MIMO	55
Use of MIMO and Beamforming	55
What the Industry is Doing to Prepare for 5G	57
Densification	57
In-building coverage	58
D-RAN and C-RAN	59
eCPRI	59
LTE Release 12 and Release 13	60
Virtualization and SDN	61
What European Mobile Operators are Doing to Prepare for 5G	62
European Union	62
Spectrum	63
Other European Developments	63
Operator Developments	63
Deutsche Telekom	63
EE	64
Elisa	64
MTS	64
Orange.....	65
Telecom Italia	65
Telefónica	65
Telia	66

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Turkcell	66
Vodafone Spain	66
Vodafone UK	66
Europe Mobile Connections and Data Traffic Forecast	68
Europe Mobile Connections Forecast	68
Table 1: Forecasted Europe Mobile Connections, 2017-2027 (Millions)	69
Figure 22: Forecasted Europe Mobile Connections, 2017-2027 (Millions)	69
Europe Mobile Data Traffic Forecast	69
Table 2: Assumed Total Europe Network Usage, 2017-2027 (EBs)	70
Figure 23: Assumed Total Europe Network Usage, 2017-2027 (EB/year)	70
Europe Infrastructure Build Cost Forecast	71
Methodology and Assumptions	71
Europe Mobile Infrastructure Build Spending by Network Component	74
Table 3a: Europe Mobile Network Infrastructure Build Spending, 2017-2022 (\$M)	75
Table 3b: Europe Mobile Network Infrastructure Build Spending, 2023-2027 (\$M)	75
Figure 24: Europe Total Mobile Network Infrastructure Build Spending, 2017-2027 (\$M) ..	76
Figure 25: Europe Mobile Network Infrastructure Build Spending by Component, 2017-2027 (\$M)	76
Table 4a: Europe Mobile Network Infrastructure Build Spending, 2017-2022 (%)	77
Table 4b: Europe Mobile Network Infrastructure Build Spending, 2023-2027 (%)	77
Figure 26: Europe Mobile Network Infrastructure Build Spending by Component, 2017-2027 (%)	78
Europe Mobile Infrastructure Build Spending by Generation	78
Table 5a: Europe Mobile Data Traffic by Generation, 2017-2022 (%)	78
Table 5b: Europe Mobile Data Traffic by Generation, 2023-2027 (%)	79
Figure 27: Europe Mobile Data Traffic by Generation, 2017-2027 (%)	79
Table 6a: Europe Mobile Network Infrastructure Build Spending by Generation, 2017-2022 (\$M)	80
Table 6b: Europe Mobile Network Infrastructure Build Spending by Generation, 2023-2027 (\$M)	80
Figure 28: Europe Mobile Network Infrastructure Build Spending by Generation, 2017-2027 (\$M)	81
Figure 29: Europe Mobile Network Infrastructure Build Spending by Generation, 2017-2027(%)	81
Europe Mobile Network Operating Cost Forecast	82
Table 7a: Europe Mobile Network Operating Costs, 2017-2022 (\$M)	82
Table 7b: Europe Mobile Network Operating Costs, 2023-2027 (\$M)	82
Figure 30: Europe Mobile Network Operating Costs, 2017-2027 (\$M)	83
Europe Total Mobile Network Cost Forecast	84
Table 8a: Total Europe Mobile Network Build and Operating Spending, 2017-2022 (\$M) ...	84
Table 8b: Total Europe Mobile Network Build and Operating Spending, 2023-2027 (\$M) ...	84
Figure 31: Total Europe Mobile Network Build and Operating Spending, 2017-2027 (\$M, Total)	85

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Figure 32: Total Europe Mobile Network Build and Operating Spending, 2017-2027 (%) 86

Major Mobile Network Infrastructure Vendor Profiles	87
Airspan Networks	87
American Tower	89
Argela	91
ClearSky Technologies	95
CommScope	96
Crown Castle	99
Ericsson	101
ExteNet Systems	105
Fujitsu Network Communications	108
Gemtek	110
Huawei	111
ip.access	114
Juni	118
Juniper Networks	119
NEC	121
Nokia Networks	124
Oracle	128
Quortus	131
Samsung Electronics	134
SBA Communications Corporation (SBA)	137
Sercomm	138
SpiderCloud Wireless (Corning)	140
ZTE Corporation	143
Definitions	148
Definitions Table	148
About iGR	168
Disclaimer	168

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Abstract

Both LTE and 3G networks provide mobile service to the vast majority of mobile subscribers in Europe. To meet the increasing demand for mobile bandwidth, especially to support video, the major mobile operators are in the process of upgrading their LTE networks with features from the latest 3GPP releases and densifying the cellular architecture. To support additional LTE capacity, mobile operators are also increasingly refarming 2G and 3G spectrum, as well as acquiring additional spectrum resources through auctions and private transactions. The next major iteration of mobile networks will be 5G, the first versions of which are expected to be deployed in Europe starting in late 2018.

The demand for mobile data bandwidth will continue to rise and mobile operators will strive to provide sufficient capacity to meet the growing needs of the subscriber base, while minimizing unnecessary network spending. As well as spending on new network builds, this includes minimizing network operating costs wherever possible.

This market study presents a model for the mobile network infrastructure investment and network operating costs, and presents a forecast for the cost of building, deploying and operating LTE and 5G networks in Europe beginning in 2017 and continuing through 2027. The build forecast is further detailed by mobile network component (RAN, front/backhaul, and core) and generation (LTE and 5G). In addition to the forecasts, the market study provides detailed information on evolving mobile network architectures, 5G networks, and how the European mobile industry is progressing towards 5G.

Key questions addressed in this market study include:

- What are the various 3GPP standards leading up to 5G and what are they likely to contain?
- What is 5G? How is it defined and/or viewed right now? When will 5G be deployed?
- What are some of the goals and use cases for 5G?
- How will major European mobile operators get from their 4G LTE networks of today to tomorrow's 5G networks?
- What is Non-standalone New Radio (NSA-NR)?
- How will the amount of data traffic carried on LTE and 5G networks grow in Europe in the next ten years?

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- How big is the LTE and 5G infrastructure opportunity in Europe in the next ten years?
- What is the share of infrastructure spending for the network components of RAN, fronthaul/backhaul, and core in the next ten years?
- What is the share of infrastructure spending for LTE and 5G in the next ten years?
- What are the expected mobile network operating costs in the next ten years?
- Who are some of the major vendors that will support LTE and 5G networks over the next ten years?

Who should read this report?

- Mobile operators
- Infrastructure OEMs
- Small cell product and solution vendors
- Backhaul service providers and equipment OEMs
- Financial analysts and investors.

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