

**Global Mobile Data
Forecast, 2017-2022:
*Continued Growth
into the 5G Era***

Market Study
First Quarter 2018





Global Mobile Data Forecast, 2017 – 2022: *Continued Growth into the 5G Era*

A Market Study

Published First Quarter, 2018
Version 1.0
Report Number: 01Q2018-05

iGR
12400 W. Hwy 71
Suite 350 PMB 341
Austin TX 78738

Table of Contents

Abstract	1
Executive Summary	2
Figure A: Global Mobile Data Traffic by Region, 2017-2022 (TB/Month)	2
Figure B: Total Global Mobile Data Traffic by Region, 2017-2022 (percent).....	3
Methodology	4
Introduction	5
Developed Markets	6
Developing Markets	7
Factors Influencing Mobile Data Demand	9
Population and Connections	9
Table 1: Worldwide Connections, Population, and Penetration, 2017-2022	9
Figure 1: Worldwide Connections and Population, 2017-2022(000)	10
Networks	10
Table 2: Worldwide Connections by Technology Generation, 2017-2022(000)	11
Figure 2: Worldwide Connections by Technology Generation, 2017-2022(000)	11
Devices	13
Price	15
Content	16
Internet of Things	19
Mobile Data Forecast Methodology	21
Connections, not Subscribers	22
Quartiles	22
World Mobile Data Usage	24
Table 3: Total Global Mobile Data Traffic per Month by Region, 2017-2022 (TB)	24
Figure 3: Total Global Mobile Data Traffic per Month by Region, 2017-2022 (TB)	25
Table 4: Total Global Mobile Data Traffic by Region, 2017-2022 (percent)	25
Figure 4: Total Global Mobile Data Traffic by Region, 2017-2022 (percent).....	26
Table 5: Total Global Mobile Data Traffic by Quartile, 2017-2022 (percent)	27
Figure 5: Total Global Mobile Data Traffic by Quartile, 2017-2022 (percent).....	27
Table 6: Average Mobile Data Consumption per Region, 2017-2022 (MB/month)	28
Figure 6: Average Mobile Data Consumption per Region, 2017-2022 (MB/month).....	29
North America	30
Table 7: North America Connections, Population, and Penetration, 2017-2022	30
Figure 7: North America Connections and Population, 2017-2022(000)	30
Table 8: Connections per Quartile in North America, 2017-2022 (000s)	31
Table 9: Per-Connection Mobile Data Use (MB/month) in North America, 2017-2022.....	31
Figure 8: Per-Connection Mobile Data Use (MB/month) in North America, 2017-2022	32
Table 10: Total Mobile Data Traffic (TB/month) in North America, 2017-2022.....	32

Quoting information from an iGillottResearch publication: external – any iGillottResearch information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from iGillottResearch. iGillottResearch reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company’s internal communications activities does not require permission from iGillottResearch. The use of large portions or the reproduction of any iGillottResearch document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2018 iGillottResearch, Inc. Reproduction is forbidden unless authorized.

FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.

Figure 9: Total Mobile Data Traffic (TB/month) in North America, 2017-2022.....	33
Table 11: Percentage of Mobile Data Traffic by Quartile in North America, 2017-2022	33
Figure 10: Percentage of Mobile Data Traffic by Quartile in North America, 2017-2022	34
North America Mobile Operator Updates	34
AT&T.....	34
Sprint.....	35
T-Mobile US.....	36
Verizon Wireless.....	36
Bell.....	37
Rogers Communications.....	37
Telus Mobility.....	37
Latin America and Caribbean.....	38
Table 12: Latin America Connections, Population, and Penetration, 2017-2022.....	38
Figure 11: Latin America Connections and Population, 2017-2022(000).....	39
Table 13: Connection per Quartile in Latin America (000s), 2017-2022	39
Table 14: Per-Connection Mobile Data Use (MB/month) in Latin America, 2017-2022	40
Figure 12: Per-Connection Mobile Data Use (MB/month) in Latin America, 2017-2022.....	40
Table 15: Total Mobile Data Traffic (TB/month) in Latin America, 2017-2022	41
Figure 13: Total Mobile Data Traffic (TB/month) in Latin America, 2017-2022	41
Table 16: Percentage of Mobile Data Traffic by Quartile in Latin America, 2017-2022	42
Figure 14: Percentage of Mobile Data Traffic by Quartile in Latin America, 2017-2022.....	42
Latin America Mobile Operator Updates.....	43
Telefonica	43
Table 17: Per Quarter Mobile Data Traffic, Telefonica 2016-2017	43
Figure 15: Per Quarter Mobile Data Traffic (in Terabytes), Telefonica 2016-2017	44
Table 18: Mobile Data Traffic per Subscriber (MB/Month), Telefonica 2016-2017.....	44
Figure 16: Mobile Data Traffic per Subscriber (MB/Month), Telefonica 2016-2017.....	45
America Movil	46
AT&T Mexico	47
Europe	48
Table 19: Europe Connections, Population, and Penetration, 2017-2022	48
Figure 17: Europe Connections and Population, 2017-2022(000)	48
Table 20: Connection per Quartile in Europe, 2017-2022.....	49
Table 21: Per-Connection Mobile Data Use (MB/month) in Europe, 2017-2022.....	49
Figure 18: Per-Connection Mobile Data Use (MB/month) in Europe, 2017-2022	50
Table 22: Total Mobile Data Traffic (TB/month) in Europe, 2017-2022.....	50
Figure 19: Total Mobile Data Traffic (TB/month) in Europe, 2017-2022.....	51
Table 23: Percentage of Mobile Data Traffic by Quartile in Europe, 2017-2022	52
Figure 20: Percentage of Mobile Data Traffic by Quartile in Europe, 2017-2022	52
Europe Mobile Operator Updates	52
Orange.....	53
Table 24: Orange’s 4G Coverage, Third Quarter 2017 vs. 2016	53
Telefonica	53
Table 25: Per Quarter Mobile Data Traffic, Telefonica 2016-2017	53
Turkcell Group.....	54

Quoting information from an iGillottResearch publication: external — any iGillottResearch information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from iGillottResearch. iGillottResearch reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company’s internal communications activities does not require permission from iGillottResearch. The use of large portions or the reproduction of any iGillottResearch document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2018 iGillottResearch, Inc. Reproduction is forbidden unless authorized.

FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.

VEON	54
Table 26: VEON Italy.....	54
Table 27: VEON Russia.....	55
Table 28: VEON Ukraine	55
Vodafone	55
Table 29: Vodafone Data Usage (TBs) by European Country	56
Middle East and Africa	57
Table 30: Middle East and Africa Connections, Population, and Penetration, 2017-2022 ...	57
Figure 21: Middle East and Africa Connections and Population, 2017-2022(000).....	58
Table 31: Connection per Quartile in MEA, 2017-2022.....	58
Table 32: Per-Connection Mobile Data Use (MB/month) in MEA, 2017-2022.....	59
Figure 22: Per-Connection Mobile Data Use (MB/month) in MEA, 2017-2022	59
Table 33: Total Mobile Data Traffic (TB/month) in MEA, 2017-2022.....	60
Figure 23: Total Mobile Data Traffic (TB/month) in MEA, 2017-2022.....	60
Table 34: Percentage of Mobile Data Traffic by Quartile in MEA, 2017-2022	61
Figure 24: Percentage of Mobile Data Traffic by Quartile in MEA, 2017-2022	61
Middle East and Africa Mobile Operator Updates	61
Etisalat.....	62
MTN.....	62
Orange.....	62
Ooredoo	62
VEON	63
Table 35: VEON Algeria	63
Vodafone	64
Table 36: Vodafone Data Usage (TB) by MEA Countries	64
Zain.....	64
Table 37: Zain Mobile Data Revenue Change Q3 2017 vs. Q3 2016	64
Asia-Pacific.....	65
Table 38: Asia-Pacific Connections, Population, and Penetration, 2017-2022	65
Figure 25: Asia-Pacific Connections and Population, 2017-2022(000).....	66
Table 39: Connections per Quartile in Asia-Pacific, 2017-2022	66
Table 40: Per-Connection Mobile Data Use (MB/month) in Asia-Pacific, 2017-2022	67
Figure 26: Per-Connection Mobile Data Use (MB/month) in Asia-Pacific, 2017-2022.....	67
Table 41: Total Mobile Data Traffic (TB/month) in Asia-Pacific, 2017-2022	68
Figure 27: Total Mobile Data Traffic (TB/month) in Asia-Pacific, 2017-2022	68
Table 42: Percentage of Mobile Data Traffic by Quartile in Asia-Pacific, 2017-2022	69
Figure 28: Percentage of Mobile Data Traffic by Quartile in Asia-Pacific, 2017-2022.....	69
Asia-Pacific Mobile Operator Updates	70
Axiata Group.....	70
China Mobile	71
Table 43: China Mobile Customer and Data Usage Statistics.....	72
China Telecom.....	72
Table 44: China Telecom Customer and Data Usage Statistics	72
China Unicom	72
Table 45: China Unicom Customer and Data Usage Statistics.....	73

Quoting information from an iGillottResearch publication: external – any iGillottResearch information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from iGillottResearch. iGillottResearch reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company’s internal communications activities does not require permission from iGillottResearch. The use of large portions or the reproduction of any iGillottResearch document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2018 iGillottResearch, Inc. Reproduction is forbidden unless authorized.

FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.

Idea Cellular.....	73
NTT DoCoMo	73
Ooredoo	74
Reliance Communications	74
Reliance Jio.....	74
SingTel Group	75
VEON	75
Table 46: VEON Pakistan	76
Table 47: VEON Bangladesh	76
Vodafone.....	76
Table 48: Vodafone Data Usage (TB) in India	77
Definitions	78
Definitions Table	78
About iGR.....	98
Disclaimer	98

Quoting information from an iGillottResearch publication: external — any iGillottResearch information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from iGillottResearch. iGillottResearch reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company’s internal communications activities does not require permission from iGillottResearch. The use of large portions or the reproduction of any iGillottResearch document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2018 iGillottResearch, Inc. Reproduction is forbidden unless authorized.

FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.

Abstract

Due to both the increasing number of mobile connections in the world and the subscribers' desire to stay constantly connected through their mobile device, the amount of data flowing over the world's mobile network is increasing exponentially. *iGR* estimates that in 2017 just under 12 million terabytes of mobile data traffic flowed over the world's cellular data networks per month, and by 2022, when the industry will be several years into commercial 5G network deployments, *iGR* forecasts mobile data traffic will rise to 82 million terabytes per month.

This report forecasts the mobile data traffic from 2017 to 2022 at the global level, as well as for the regions of North America, Latin America, Europe, Middle East and Africa, and Asia-Pacific.

For each region, *iGR* forecasts the number of connections, the amount of data usage per connection per month in four different quartiles, and the total amount of mobile data traffic per month.

Key questions addressed:

- What are the drivers of mobile data traffic?
- What are some of the limiting factors on the amount of mobile data traffic?
- What is mobile data usage today in all regions of the world and at what rate is mobile data usage expected to grow over the forecast period?
- For each region, how much mobile data traffic is used by an average mobile connection?
- For each region, how much mobile data traffic is used by each quartile?
- What levels of mobile data usage are some of the major mobile operators in each region experiencing and what initiatives are they using to meet the demand?

Who should read this report:

- Mobile operators
- Device OEMs
- Mobile infrastructure and equipment OEMs
- Content providers and distributors
- Financial analysts and investors.

Quoting information from an *iGillottResearch* publication: external — any *iGillottResearch* information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from *iGillottResearch*. *iGillottResearch* reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from *iGillottResearch*. The use of large portions or the reproduction of any *iGillottResearch* document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2018 *iGillottResearch*, Inc. Reproduction is forbidden unless authorized.

FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.

Quoting information from an *iGillottResearch* publication: external — any *iGillottResearch* information that is to be used in press releases, sales presentations, marketing materials, advertising, or promotional materials requires prior written approval from *iGillottResearch*. *iGillottResearch* reserves the right to deny approval of external usage for any reason. Internal-quoting individual sentences and paragraphs for use in your company's internal communications activities does not require permission from *iGillottResearch*. The use of large portions or the reproduction of any *iGillottResearch* document in its entirety does require prior written approval and may have some financial implications.

Copyright © 2018 *iGillottResearch*, Inc. Reproduction is forbidden unless authorized.

FOR INFORMATION PLEASE CONTACT IAIN GILLOTT (512) 263-5682.