



RESEARCH FORECAST REPORT

WIRELESS NETWORK DATA TRAFFIC IN THE MIDDLE EAST AND NORTH AFRICA: TRENDS AND FORECASTS 2016–2021

STEPHEN WILSON

analysysmason.com



About this report

This report presents 5-year forecasts of wireless data traffic worldwide for the **Middle East and North Africa (MENA)**, as a whole and for selected countries. It analyses the key trends in, and drivers and inhibitors of, data traffic. The forecast dataset underpinning this report covers:

- **mobile data:** data delivered over mobile (cellular) networks to: handsets (typically smartphones); mid-screen devices (typically tablets); USB modems, routers and other standalone data devices; median usage per smartphone; and downstream and upstream
- **Wi-Fi data:** data delivered over private Wi-Fi connections (at home or work) to handsets and mid-screen devices, and data delivered to all devices using public Wi-Fi connectivity.

The report assesses the enablers of future capacity on wireless networks and the cost of supplying that capacity.

It also analyses the trends in private and public usage, and their effect on the use of mobile and Wi-Fi connectivity.

This report is based on Analysys Mason's:

- internal research and modelling
- consumer surveys on smartphone and tablet usage.

Our forecasts are informed and sense-checked by on-the-ground regional market experts.

Summary of report coverage

Geographical coverage	Major KPIs	
	Mobile data	Wi-Fi data
Regions modelled: <ul style="list-style-type: none"> ▪ Worldwide ▪ Middle East and North Africa (MENA) Countries modelled individually: <ul style="list-style-type: none"> ▪ Oman ▪ Qatar ▪ Saudi Arabia ▪ UAE 	Total volume and average usage for: <ul style="list-style-type: none"> ▪ handsets ▪ mid-screen devices ▪ USB modems and routers Traffic split by: <ul style="list-style-type: none"> ▪ public and private usage ▪ median usage per smartphone ▪ downstream and upstream 	Total volume and average usage for: <ul style="list-style-type: none"> ▪ handsets ▪ mid-screen devices, split by mobile-connected and Wi-Fi-only devices ▪ laptops (public Wi-Fi connectivity only) Traffic split by: <ul style="list-style-type: none"> ▪ public and private usage.

The report serves as a companion to *Wireless network data traffic: worldwide trends and forecasts 2016–2021*.¹

¹ For more information, see Analysys Mason's [Wireless network data traffic: worldwide trends and forecasts 2015–2020](#).

Contents

5. Executive summary

6. Executive summary

7. Worldwide trends

8. Worldwide: The rate of growth for cellular data traffic will slow considerably during the forecast period

9. Worldwide: Rapid 4G adoption in India and China is driving cellular data traffic growth

10. Worldwide: Even in 2021 there will still be some correlation between income levels and monthly handset usage

11. Worldwide: Dongle and router traffic is not set to account for a large proportion of traffic across most emerging markets

12. Worldwide: Public Wi-Fi traffic's share of total out-of-home traffic is declining in developed markets

13. Worldwide: There continues to be little correlation between cellular data traffic growth and operator revenue

14. Worldwide: Removing unlimited throttled speed prepaid data quotas can significantly reduce traffic, but its commercial impact has been mixed

15. Worldwide: Offering unlimited throttled speed video traffic need not increase video traffic and could be a significant differentiator

16. Regional trends

17. Middle East and North Africa: GCC markets are showing solid rates of growth

18. Middle East and North Africa: There is still significant potential for traffic growth in the region

19. Country-level trends

20. Oman: Stable market dynamics limit dramatic data traffic growth

21. Qatar: Data usage is low compared to average income levels

22. Saudi Arabia: Traffic from dongles and routers will become less important

23. UAE: Data traffic growth is restricted by the affordability of prepaid data to immigrant groups

24. Forecast methodology and assumptions

25. Definition of geographical regions [1]

26. Definition of geographical regions [2]

27. Forecast methodology and assumptions

28. About the author and Analysys Mason

29. About the author

30. Analysys Mason's consulting and research are uniquely positioned

31. Research from Analysys Mason

32. Consulting from Analysys Mason

List of figures

Figure 1: Cellular data traffic by market and 4G device share, Middle East and North Africa, 2014–2021

Figure 2: Cellular data traffic by region, 2014–2021

Figure 3: Share of traffic over 2G/3G and 4G and higher devices, worldwide, emerging and developed economies, 2014–2021

Figure 4: Cellular data traffic, worldwide, developed economies and emerging economies, 2014–2021, Analysys Mason 2015 and 2016 forecasts

Figure 5: Monthly data traffic per handset against GDP per capita, 2021, selected countries worldwide

Figure 6: Dongle and router share of total cellular data traffic, selected countries, 2016 and 2021

Figure 7: South Korea's public Wi-Fi traffic carried through operators' networks, year-on-year growth, 1Q 2014–3Q 2016

Figure 8: Year-on-year mobile data traffic growth, overall retail revenue growth and data revenue growth, worldwide, 2014–2016

Figure 9: Year-on-year mobile data revenue and cellular data traffic by developed market region, 2015 and 2016

Figure 10: Telefonica Brasil data traffic and net mobile service revenue year-on-year growth, 1Q 2014–4Q 2015

Figure 11: Ratio of data consumption by video resolution format (144p = 1)

Figure 12: Annual rate of growth, cellular data traffic, selected MENA markets, 2014–2017

Figure 13: Cellular data traffic per head of population per month, selected MENA markets, 2015 and 2016

Figure 14: Cellular data traffic by market and 4G device share, Middle East and North Africa, 2014–2021

Figure 15: Cellular data traffic by device type, Oman, 2016–2021

Figure 16: Cellular data traffic by device type, Qatar, 2016–2021

Figure 17: Cellular data traffic by device type, Saudi Arabia, 2016–2021

Figure 18: Cellular data traffic by device type, UAE, 2016–2021

Figure 19a: Regional breakdown used in this report

Figure 19b: Regional breakdown used in this report

Middle East and North Africa: GCC markets are showing solid rates of growth

In the wealthier GCC countries, growth continues to be robust (although the general trend continues to be one of decline), with 2016 annual growth rates ranging from 44% in Saudi Arabia to 61% in Qatar.

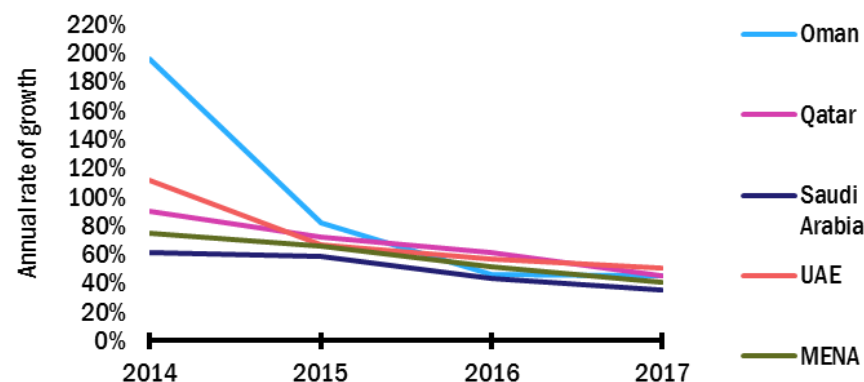
The level of reporting and disclosure on mobile networks in the Middle East and North Africa remains poor, and our forecasts for this region have a higher level of uncertainty than in the rest of the regions worldwide.

This region is also very diverse, encompassing wealthy oil exporting nations as well as significantly poorer countries. This is demonstrated by the fact the smartphone share of handsets at the end of 2016 is forecast to be only 21% in Egypt, compared with 66% in the UAE.

The competitive outlook remains largely benign across the region, although the granting of a 4G licence to fixed-line incumbent Telecom Egypt in December 2016 should help to boost data traffic in the region's most populous state.

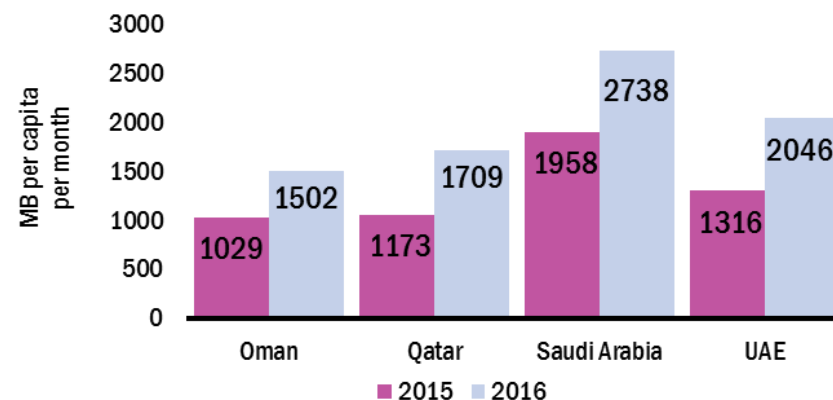
Mobile operators in a number of markets in the region are showing interest in offering wireline services, which will place constraints on overall cellular data traffic growth. For example, Mobily in Saudi Arabia has made significant investments in building its own FTTx network.

Figure 12: Annual rate of growth, cellular data traffic, selected MENA markets, 2014–2017



Source: Analysys Mason

Figure 13: Cellular data traffic per head of population per month, selected MENA markets, 2015 and 2016



Source: Analysys Mason

Middle East and North Africa: There is still significant potential for traffic growth in the region



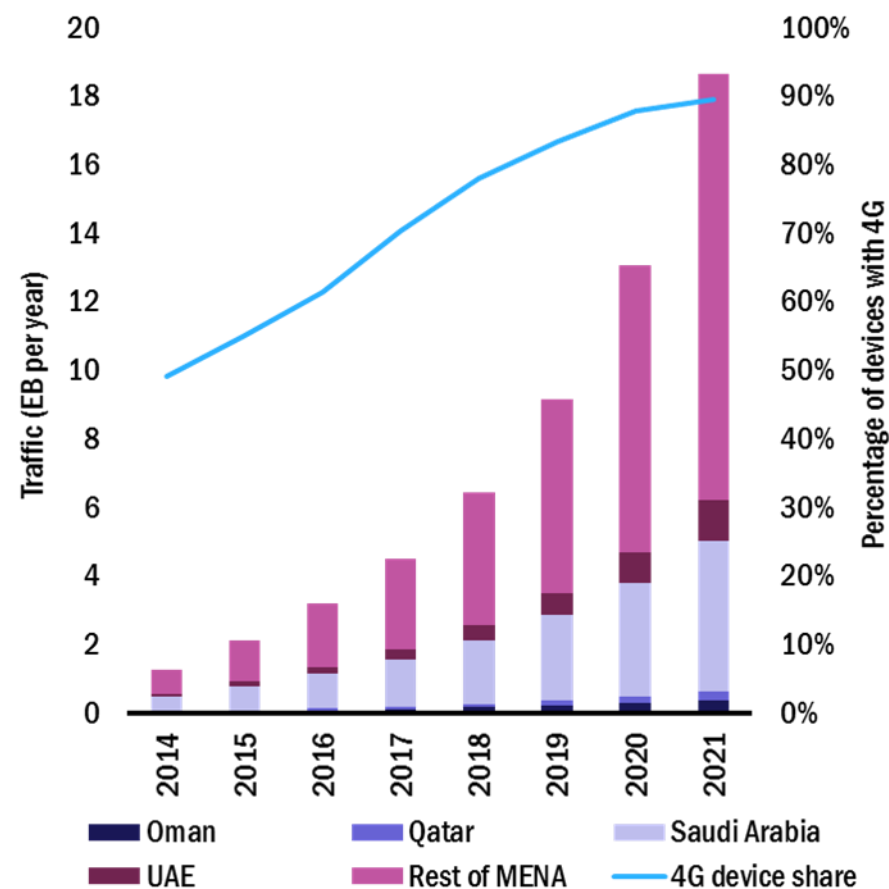
The less wealthy markets in the MENA region will gradually account for a higher share of traffic in the period to 2021.

Qatar and the UAE are both duopoly markets, and the lack of new infrastructure players will limit growth in these markets although existing LTE-A deployments should provide a boost. These countries' share of the regional traffic total will remain broadly unchanged by 2021.

Growth in Saudi Arabia will be aided by third-entrant Zain's attractively priced mobile data packages. In 2014, the operator launched the Shabab prepaid package, which it continues to offer and includes unlimited YouTube access. However, operators have reined in usage on LTE fixed-wireless networks and Zain has also indicated it is considering launching fibre broadband access; these factors ensure that Saudi Arabia's growth rates will be lower than those in the UAE or Qatar in the forecast period.

Much of the rest of the MENA region remains affected by political instability, which will have a significant negative impact on cellular data traffic growth rates. However, there is more room for growth than in the more-developed countries, including the potential for growth in 4G access. For example, the 4G licensing process in Egypt was only completed in October 2016, and Orange in Egypt is currently offering a double-sized data allowance for those subscribing to 4G. The rest of the MENA region will therefore grow its share of the region's traffic from 58% in 2016 to 67% in 2021.

Figure 14: Cellular data traffic by market and 4G device share, Middle East and North Africa, 2014–2021



Source: Analysys Mason

CONTENTS

EXECUTIVE SUMMARY

WORLDWIDE TRENDS

REGIONAL TRENDS

COUNTRY-LEVEL TRENDS

OMAN

QATAR

SAUDI ARABIA

UAE

FORECAST METHODOLOGY AND ASSUMPTIONS

ABOUT THE AUTHOR AND ANALYSYS MASON

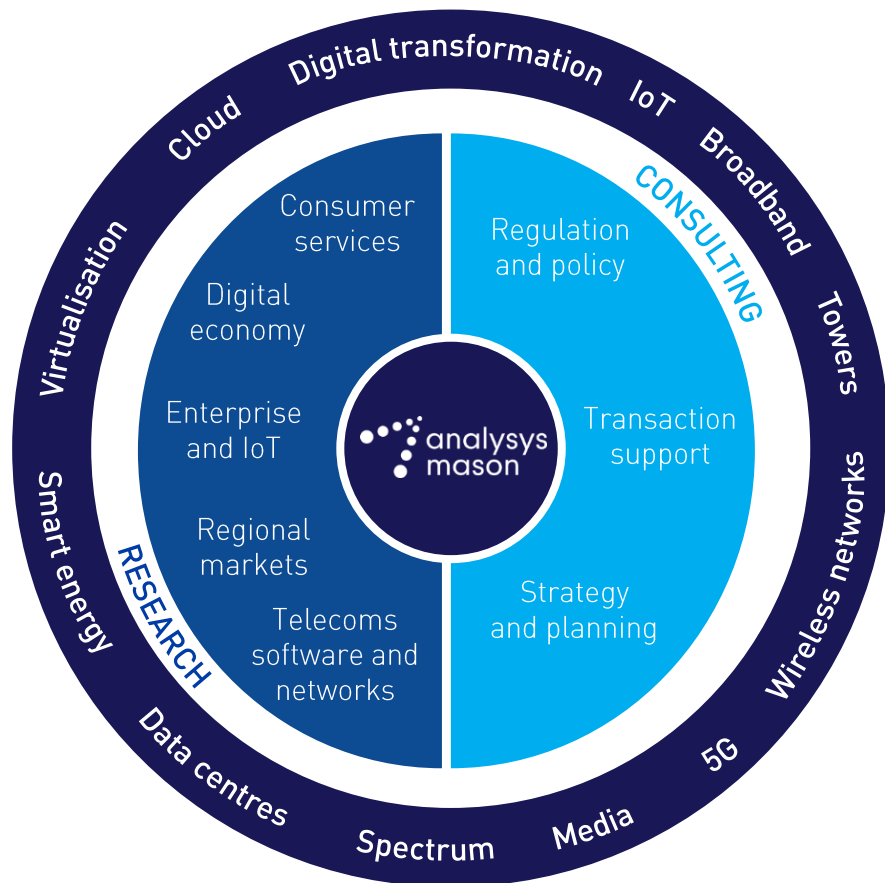
About the author



Stephen Wilson (Principal Analyst) contributes research to our *Fixed Networks* and *Wireless Networks* research programmes. He joined Analysys Mason as a Senior Analyst in November 2012, having previously worked for Informa Telecoms & Media. Stephen has more than 5 years of experience of covering the telecoms industry and specialises in analysing fixed broadband access technologies and strategies, as well as developments in European telecoms markets across fixed and mobile sectors. He has produced reports on DSL acceleration technologies as well as regular updates on European markets, notably in Central and Eastern Europe. Stephen is a graduate in Politics, Philosophy and Economics from St Catherine's College, Oxford University.

Analysys Mason's consulting and research are uniquely positioned

Analysys Mason's consulting services and research portfolio



CONSULTING

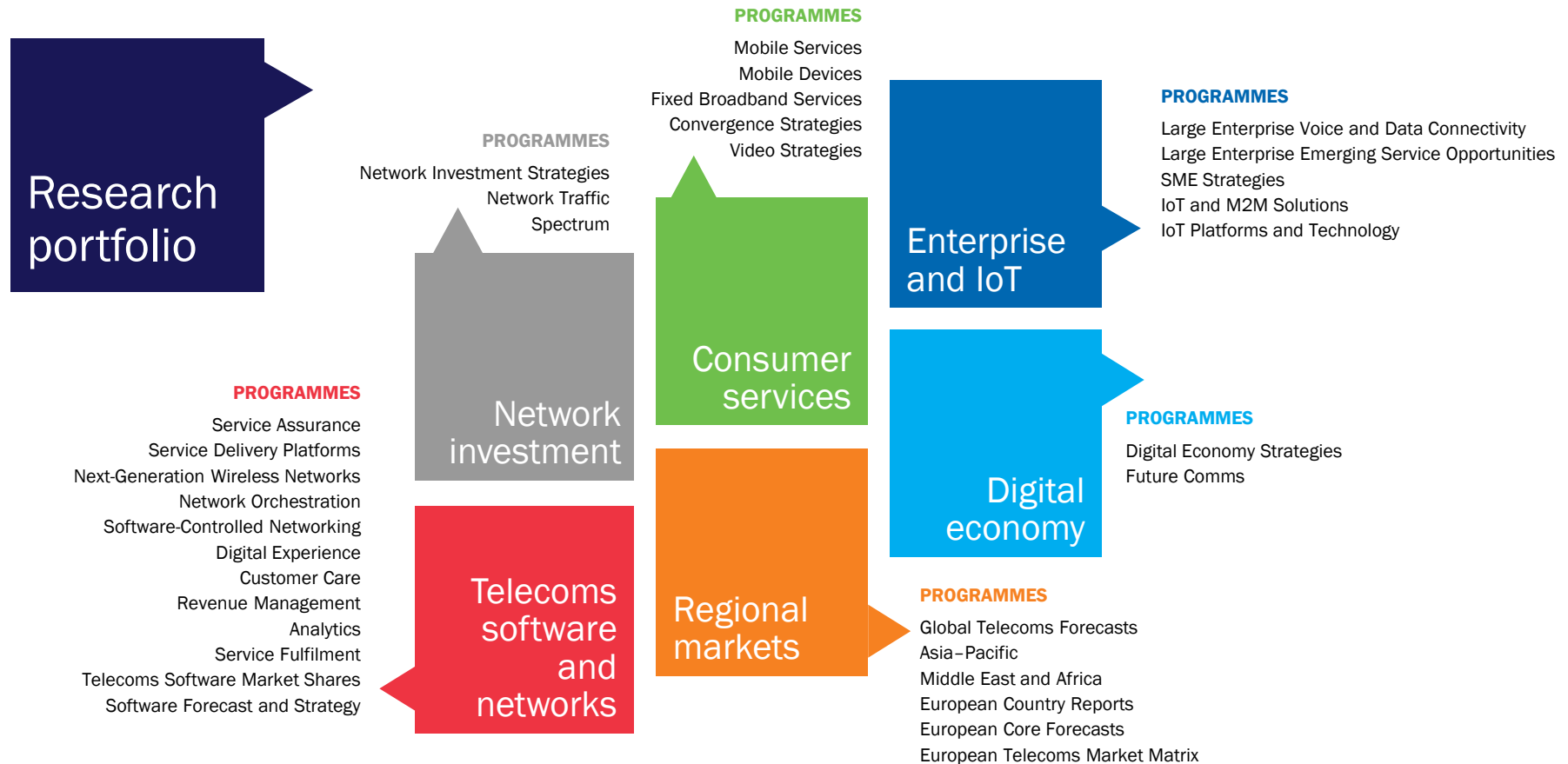
- We deliver tangible benefits to clients across the telecoms industry:
 - communications and digital service providers, vendors, financial and strategic investors, private equity and infrastructure funds, governments, regulators, broadcasters, and service and content providers
- Our sector specialists understand the distinct local challenges facing clients, in addition to the wider effects of global forces.
- We are future-focused and help clients understand the challenges and opportunities that new technology brings.

RESEARCH

- Our dedicated team of analysts track and forecast the different services accessed by consumers and enterprises.
- We offer detailed insight into the software, infrastructure and technology delivering those services.
- Clients benefit from regular and timely intelligence, and direct access to analysts.

Research from Analysys Mason

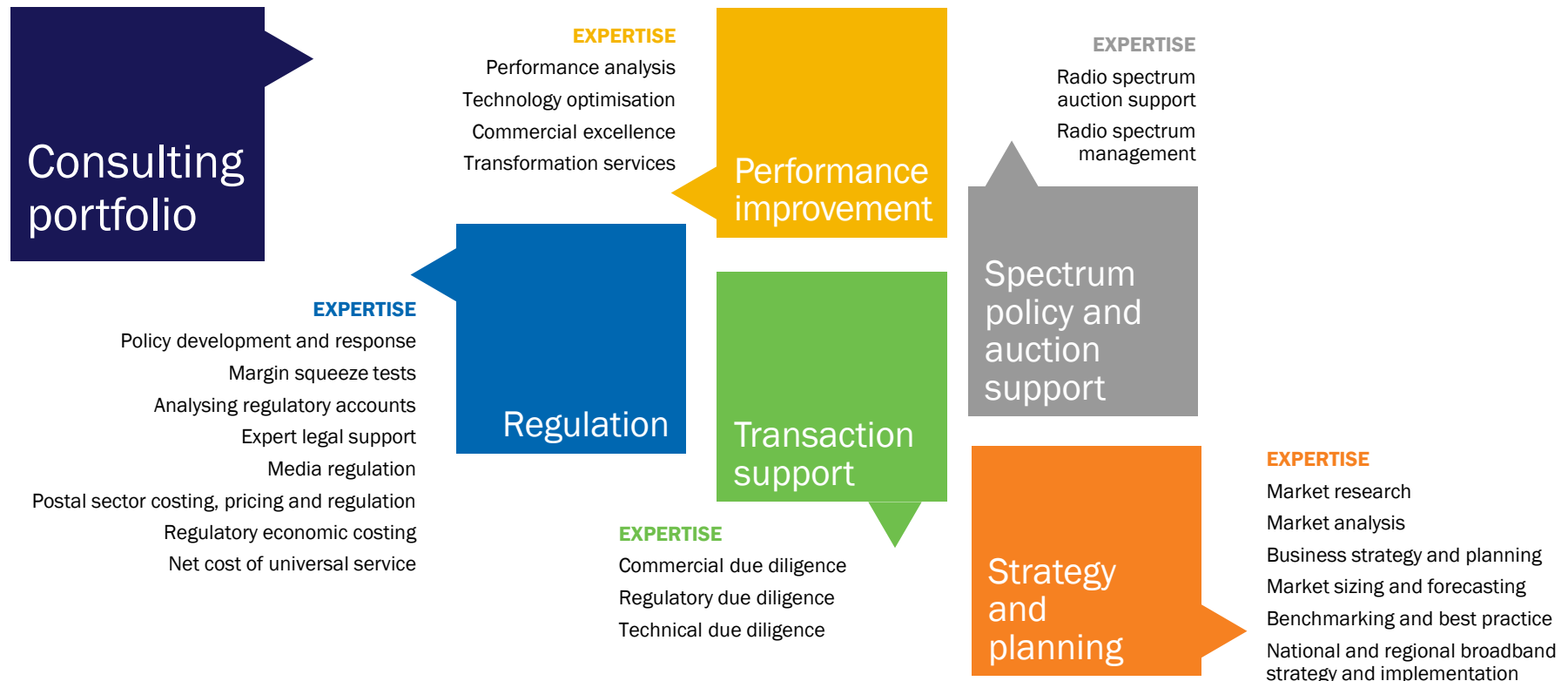
We provide dedicated coverage of developments in the telecoms, media and technology (TMT) sectors, through a range of research programmes that focus on different services and regions of the world.



www.analysysmason.com/research

Consulting from Analysys Mason

For 30 years, our consultants have been bringing the benefits of applied intelligence to enable clients around the world to make the most of their opportunities.



To find out more, please visit www.analysysmason.com/consulting



PUBLISHED BY ANALYSYS MASON LIMITED IN MARCH 2017

Bush House • North West Wing • Aldwych • London • WC2B 4PJ • UK

Tel: +44 (0)20 7395 9000 • Email: research@analysismason.com • www.analysismason.com/research • Registered in England No. 5177472

© Analysys Mason Limited 2017. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means – electronic, mechanical, photocopying, recording or otherwise – without the prior written permission of the publisher.

Figures and projections contained in this report are based on publicly available information only and are produced by the Research Division of Analysys Mason Limited independently of any client-specific work within Analysys Mason Limited. The opinions expressed are those of the stated authors only.

Analysys Mason Limited recognises that many terms appearing in this report are proprietary; all such trademarks are acknowledged and every effort has been made to indicate them by the normal UK publishing practice of capitalisation. However, the presence of a term, in whatever form, does not affect its legal status as a trademark.

Analysys Mason Limited maintains that all reasonable care and skill have been used in the compilation of this publication. However, Analysys Mason Limited shall not be under any liability for loss or damage (including consequential loss) whatsoever or howsoever arising as a result of the use of this publication by the customer, his servants, agents or any third party.