



Unwired insight

when a superficial assessment is not enough

Brings together
3G traffic and
capacity forecasts
for the first time

New report

Will 3G Networks Cope?

3G traffic and capacity forecasts, 2009–2014

A report by Dr Alastair Brydon and Dr Mark Heath

120 pages, 29 figures,
18 tables and 30 000 words



Dr Alastair Brydon

“3G operators have been reporting annual increases of **300 to 700%** in 3G data traffic volumes.”

“We **forecast future 3G traffic volumes and quantify 3G network capacities** to answer the big question—**will 3G networks cope?**”

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OVERVIEW

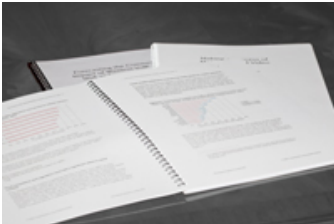
Since 2007, 3G networks worldwide have experienced substantial traffic growth, due to strong take-up of mobile broadband services and the initial migration of 2/2.5G users to 3G services. Operators have reported annual increases in 3G data traffic volumes of 300—700%.

While 3G traffic volume increases have been manageable so far—because volumes have increased from very low levels—we forecast further large traffic volume increases, due to rapid migration of 2/2.5G users to 3G services, increasing proportions of smartphones and USB modems/datacards and the introduction of HSPA+ and LTE.

For some 3G operators, today's HSPA networks will not support 3G traffic volumes for long, and they have big decisions to make.

Will 3G Networks Cope? answers your key questions:

- How will the service mix on a range of 3G devices (basic phones, smartphones and USB modems/datacards) evolve over the next five years?
- By how much will 3G traffic volumes increase in the next five years?
- What capacities will HSPA, HSPA+ and LTE networks realistically provide?
- Will 3G network capacity keep up with traffic volume increases? When will HSPA networks run out of capacity?
- When will HSPA+ and LTE be necessary, and what spectrum will be required?
- What are the implications for different types of 3G operator?



WHY YOU NEED THIS REPORT

- The risks are huge. 3G volumes are increasing dramatically and HSPA networks may not be able to support these increases for long.
- This report is unique in bringing together forecasts for 3G traffic volumes and network capacities.
- The report identifies the technologies 3G operators should invest in, and when.
- It quantifies how much spectrum will be required, and when.
- The report defines the best strategy for different types of 3G operator.

WHAT YOU GET

- **120 pages, 35 figures, 24 tables and 30000 words.**
- Usage forecasts for 2009—2014 derived from a comprehensive usage model.
- Quantification of network capacities for HSPA, HSPA+, LTE and LTE-Advance, for different spectrum allocations and deployment scenarios.
- Modelling of complementary delivery mechanisms to 3G macrocells, including WLAN access points, femtocells, broadcasting networks and sideloading.
- Evaluation of different types of 3G operator.

ABOUT THE AUTHORS

Dr Alastair Brydon and Dr Mark Heath co-founded Unwired Insight Limited in 2001, following many years experience in network operators and equipment vendors. Unwired Insight provides research and consultancy in wireless technologies and services.

This is the first report under the Unwired Insight brand. Previously, Unwired Insight has authored over 40 mobile industry reports published by Analysys Mason. These include:

3G-Infrastructure Sharing: the future for mobile networks

Femtocells in the Consumer Market: business case and marketing plan

The Business Case for WiMAX

The Future of the Global Wireless Industry

3G Network Evolution from 2007 to 2012: HSPA+, LTE, WiMAX and femtocells

The Acceleration of Fixed—Mobile Substitution in Western Europe: facts and figures

The World's Top Ten Non-voice Services.

Their reports have been purchased by over 100 companies worldwide, including the world's leading operators, and network infrastructure vendors.

For more information, go to:

www.unwiredinsight.com



Prior to joining Unwired Insight, Alastair Brydon reported to Nokia's European management team and worked with many of Nokia's customers to implement market firsts ranging from the introduction of prepaid mobile tariffs to new mass-market content services. Previously, Alastair worked in a number of roles for the BT Group, focusing on the evolution of wireless technologies, networks and services. He also contributed to international research and standardisation of GSM, DECT and 3G. Alastair holds BSc and PhD degrees from UMIST, where he was awarded the IEE Prize for top student.



Prior to Unwired Insight, Mark Heath held a number of marketing and business development roles in Nokia, ultimately defining strategy and business development across Europe. Previously, Mark was responsible for business planning at BT Cellnet in the UK, after spending six years at BT in wireless systems research and development. He holds BSc and PhD degrees from the University of Leeds, winning the University prize for his research in telecommunications. Mark also holds an MBA, graduating as top student from Henley Management College.



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