

# **Global Mobile LTE RAN Virtualization Forecast, 2013 - 2017: *Benefit of the BTS Hotel***

Market Study  
Third Quarter, 2013





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A Market Study

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## Abstract

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Mobile virtualization is a hot topic in the wireless industry today. However, there is considerable lack of knowledge as to what constitutes mobile virtualization and how and when it will be implemented by mobile operators.

This report discusses the potential impact of mobile RAN (radio access network) virtualization, including base station hoteling, the potential benefits both in terms of CapEx and OpEx to operators deploying LTE, and the global implications.

For Mobile RAN virtualization, splitting of the base station into a Remote Radio Head (RRH) or Radio Unit (RU) and baseband is required. The RRH is mounted where required and connected to the baseband unit via fiber optic – the baseband is located in a convenient data center. The baseband units for a metro market can therefore be co-located and could use standard hardware, hence reducing cost, improving reliability and easing maintenance.

Key questions addressed in this report:

- What is mobile RAN virtualization?
- What types of mobile RAN virtualization exist and how do they differ?
- What are the current standards efforts associated with mobile RAN virtualization?
- What is the current status of CRPI and how is it used in mobile RAN virtualization?
- What are the strengths and weaknesses associated with mobile RAN virtualization?
- What new business models are enabled by mobile RAN virtualization?
- What is the potential opportunity for BTS hoteling?
- How much are the mobile operators expected to spend globally on LTE RANs in terms of CapEx and OpEx?
- What are the potential savings associated with mobile LTE RAN virtualization for the world's mobile operators (by region) in terms of CapEx and OpEx?

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- What is the potential impact of mobile RAN virtualization on the mobile infrastructure OEMs such as Alcatel-Lucent, Ericsson, Cisco, Nokia Solutions & Networks, Samsung, ZTE and Huawei?

Who should read this report?

- Mobile network operators and MVNOs
- Mobile infrastructure OEMs
- Small cell vendors and OEMs
- Cellular tower companies and data center vendors
- Virtualization software and solution vendors
- Financial analysts and investors.

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