

# The Economic and Social Benefits of Mobile Broadband in Egypt

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# Agenda

Challenges for operators

Potential benefits

Recommendations

- Mobile broadband has the potential to significantly increase Egypt's GDP and employment market, and benefit all citizens through social and cultural benefits
- Government actions will determine whether these benefits are achieved
- The industry needs access to further spectrum to increase capacity and lower costs of provision – this must be awarded as soon as possible
- Welfare is maximised if this spectrum is awarded through a fair and open process

# Challenges for operators

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- Increasing demand requires expanding capacity



## Costs

- Additional capacity through network investment is expensive
- Fibre and international gateway access is expensive and limited



## Revenues

- ARPU is falling
- Subscription growth is slowing

- Options for capacity are limited
  - Spectrum availability is uncertain
  - Planning permission and regulations prevent network rollout
- Investment and regulatory uncertainty preclude capital expenditure
  - Operators require time to build up capacity

# Challenges for operators

Difficult to invest  
in new network

- Low profitability
- Uncertainty

Capacity  
constraints lead  
to poorer quality  
of service

New types of  
service cannot  
be launched

Access to sites  
and  
infrastructure  
limited

Decisions take  
time to be  
implemented

# Potential benefits

# Sources of benefit

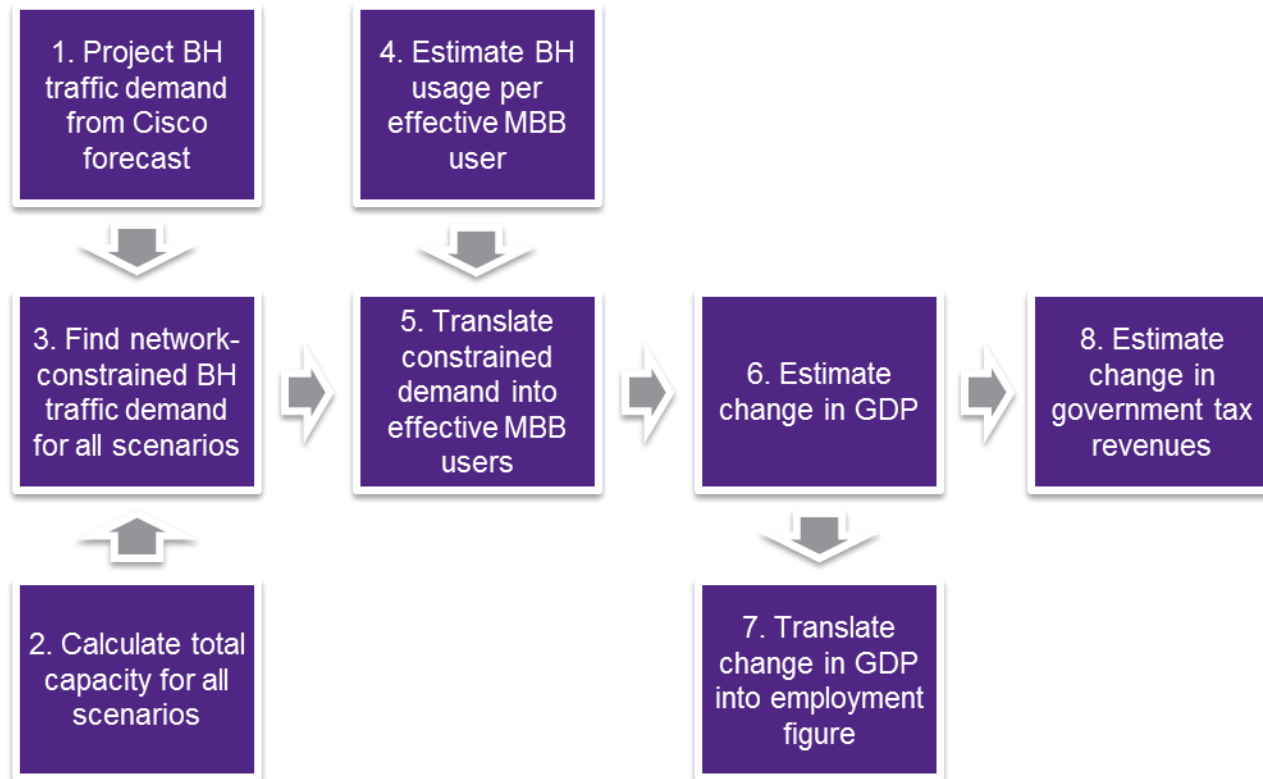
## Economic benefits

- Productivity improvements
- GDP growth
- Employment
- Consumer surplus

## Social and cultural benefits

- Personal finance
- Health
- Education
- Environment
- Access to government

# Economic benefit: methodology

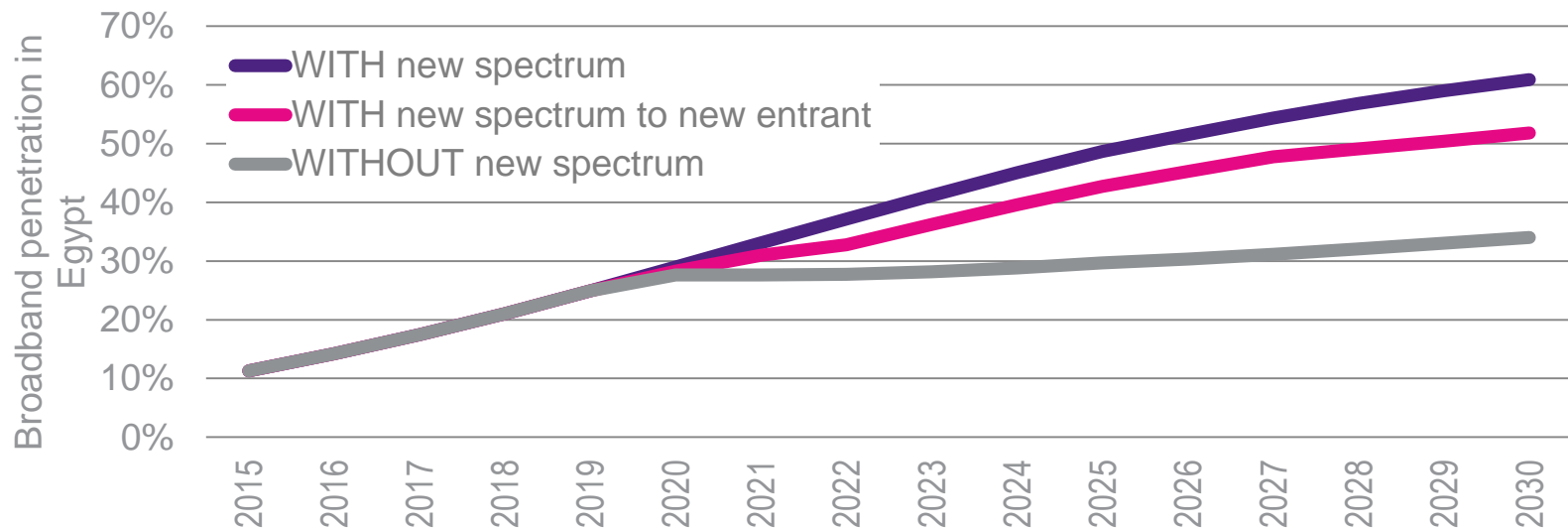


- Changes in GDP are based on academic studies on productivity gains
- Increased GDP (less taxes and savings) can support additional employment

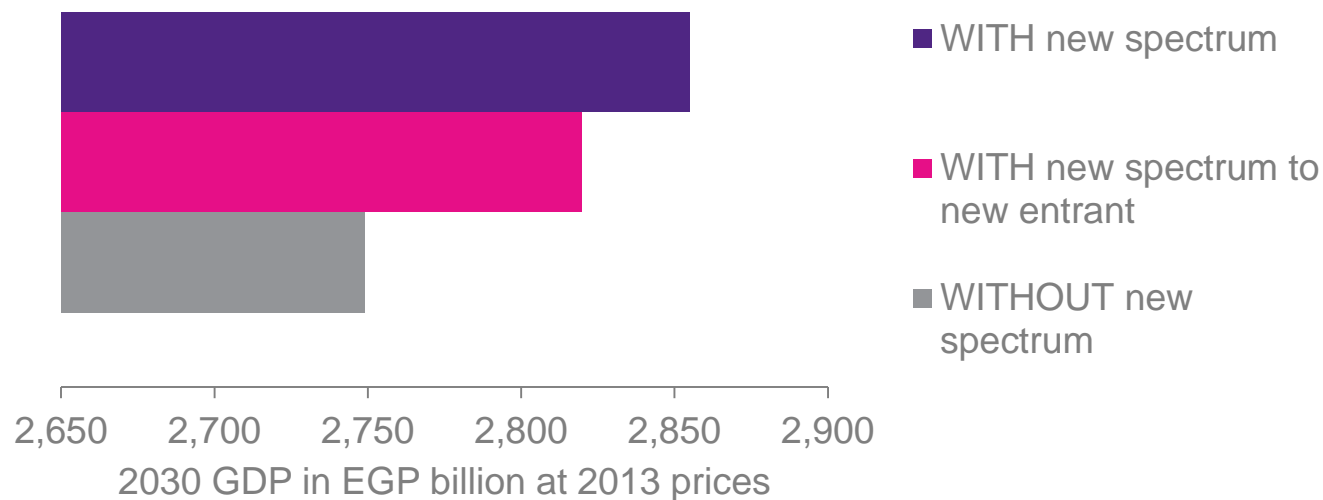


# Economic benefit: scenarios

- The base case is the current situation: no additional spectrum released
- Scenario 1 is the welfare maximising scenario
  - All new spectrum is released in an open award
  - There are no constraints on backhaul or other links
- Scenario 2 represents the situation where spectrum is awarded to a 'new entrant'
  - Lower quality of service and higher prices



# Economic benefit: results

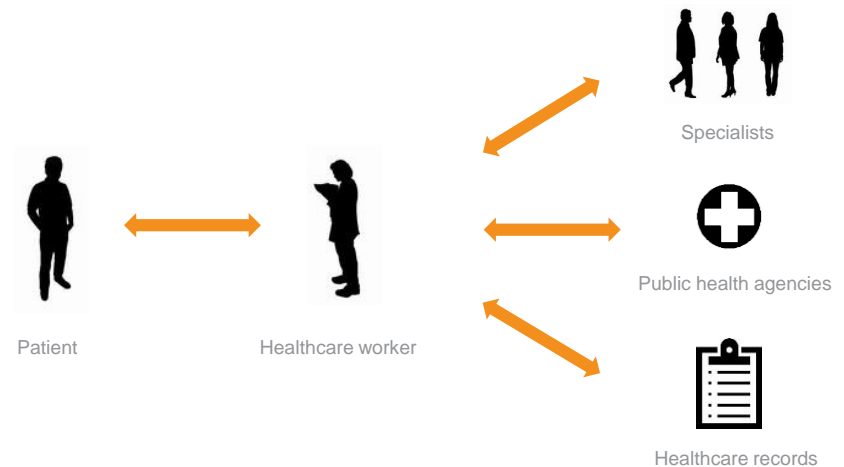
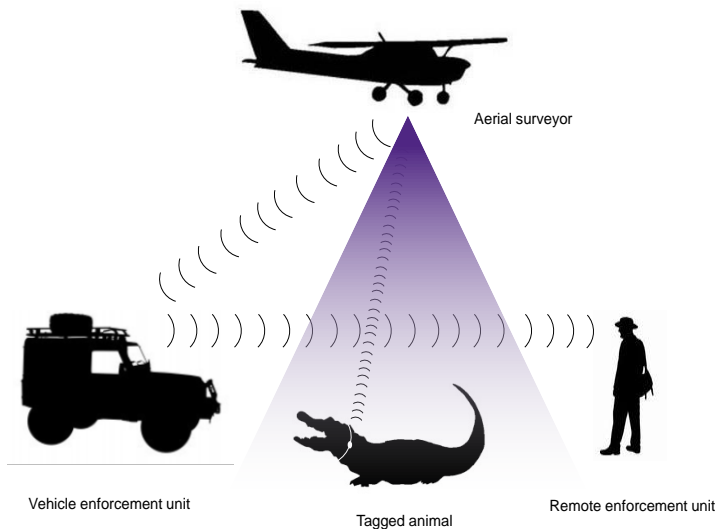


- Growth in GDP driven by mobile penetration
- Net present value of Scenario 1 is EGP310billion over the next 15 years
  - This is reduced to EGP206billion under Scenario 2
- After adjusting for tax and savings this can enable the creation of up to 1.2 million jobs

# Social and cultural benefits

- Size of benefits are driven by penetration
- Any benefit will be additive to economic estimates
- Consumer welfare is a further economic benefit

Our report contains numerous examples of where broadband in Egypt is already facilitating new services and increases in citizens' welfare.



# Recommendations

# Our recommendations

- A new national broadband plan
  - Set targets and policies for the markets for the long term
  - Relative targets for fixed and mobile should reflect the increased importance of mobile telecommunications in the economy
- Spectrum availability
  - Particularly in the 700 MHz and 800 MHz bands
  - Awarded through a fair and transparent process
- A predictable environment for investment
  - Amount of spectrum and milestones mapped out
  - Available well in advance of capacity constraints

# Our recommendations

- Access to infrastructure
  - Fibre duct, international gateway, landing stations and tower sites
  - Price and access regulation, including competition
- Mobile broadband must be promoted
  - The most efficient way of providing new Internet services
- Freedom to innovate in Internet services
  - Government services can improve their usage of online services

# Questions