# Impact of Ebola on Digital Infrastructure

### **Objectives of presentation**

- Highlight challenges within the ICT sector due to the impact of EVD
  - Human, financial, systems
- Highlight current and potential opportunities;
- Note lessons learnt for future emergency response situations.

### Overall economic impact of Ebola

- Increased risk profile and uncertainties for sub-region:
  - Affected the sub region as a whole not just Liberia, Sierra Leone and Guinea;
  - Knock on effects for sub-regional economies in general effects on business, tourism even outside of the subregion;
- Increased risk profile and uncertainties for Liberia:
  - 5 major airlines to 2 major airlines;
  - Major transport routes including shipping affected;
  - Dramatic shortfall in business in general;
  - Projected decrease in annual GDP and projected growth.

### Overall economic impact of Ebola

- Traditional sectors hard hit, hardest:
  - Health, agriculture, education;
  - Wider socio-economic impact on general population;
  - Closure of several small businesses
- Economic impact on telecoms sector perhaps less visible to wider public (as compared to others) but just as severe.

## Impact on Digital Infrastructure - Human

- Distraction of Management Focus:
- Fall in employee focus and productivity distracted by situation, directly affected, fear;
- Corporate leaders and decision makers overwhelmed by an unprecedented crisis;
- International suppliers of services unwilling to deploy personnel;
- Development plans e.g. roll out of telecom/digital goods and services halted during the crisis.

## Impact on Digital Infrastructure - Financial

- Drastic reduction in revenue:
  - Flight of high value customers
  - Flight of expat/technical experts including those within the telecoms sector
  - Shut down of multi-national corporations e.g.
    ArcelorMittal, Chevron, etc.

## Impact on Digital Infrastructure - Financial

- Increased cost of operations, loss of revenue and inability to increase cost of services
  - Access to remote facilities for refueling and maintenance difficult: travel checkpoints and quarantines, fear, unwillingness and inability of staff to travel etc.
  - Unreliable supply and increased fuel costs;
  - Supply chain links broken difficult to get maintenance, resources due to reduction in transportation options

# Impact on Digital Infrastructure - Systems

- Strain on current infrastructure:
  - Poor voice quality, latency in SMS
  - Many Liberians used Facebook, Twitter,
    WhatsApp, and other social networking sites to communicate during crisis

- Digital services essential backbone for any coordinated emergency response service to support awareness, community mobilization, outreach etc.
- Robust telecom network needed to support partners
  - Internal : GOL, development agencies
  - External : CDC, WHO, US Government, for example
    US Military bandwidth requirement equivalent to 50% of Liberia's total bandwidth usage

- Digital services used to :
  - Communicate accurate information and relevant material amongst communities e.g. EOC, mHero
  - Facilitate communication between family members restricted by quarantine, travel or even illness
  - Map the spread of the disease to allow for better coordinated medical response
  - Create networks for professionals and others dealing with Ebola

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  - Provide access to news and social media websites for news and information

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#### Lessons...

- Revealed weakness in telecoms/digital infrastructure
- Emphasized the need for a better/fully digitized Liberia
- Heightened the need for more investments in the sector to allow for better crisis management

#### Lessons...

- Potential priorities:
  - Expansion of services to under served areas
  - Expand digital services to include resources and support for health, education, community awareness, access to government services
  - Expand trained human capacity (higher education)
  - Address legal and regulatory environments to support a digitized Liberia