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## Working Group on access and affordability – Draft Report

Meeting of the Advisory Board, 2 February 2018, GSMA, London

## Introduction



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- The Working Group on Partnerships is a sub-group of the m-Powering Development Initiative Advisory Board tasked with focusing on means to advance access (connectivity) and affordability through mobile technology and devices, taking into consideration the need for relevant content, apps and services. The Group will focus on how ICTs can empower the poorest and most marginalized population groups.
- The objective of the working group is to provide input to the work of the Advisory Board.
- Since the last Board meeting, the Working Group has worked on developing the draft report.

# Activities



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As part of the terms of reference, the working group will carry out the following activities:

- Identify key stakeholders and new players;
- Identify existing technologies and mobile devices that could enable affordable access;
- Identify potential technical, regulatory and commercial barriers for the implementation of these technologies and devices;
- Research innovative incentive mechanisms to extend access, connectivity and uptake;
- Carry out a needs analysis by identifying and surfacing use cases (m-health, m-education, m-banking, m-agriculture, m-governance, etc.);
- Examine the potential of unified platforms, providing for the integration of databases with application platform and transactional capability, in empowering the poorest and marginalised population;
- Identify innovative business models for sustainable connectivity taking into consideration affordability within the targeted group;
- Draft a work plan for concrete actions;
- Carry out the activities that will support the implementation of the Initiative work plan.

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# Overview of the draft report



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## Key stakeholders and new players



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- **Federal Government** – for universal access planning and implementation, incentives to encourage use of digital services,
- **Local Government** – for right of way permissions, and faster execution
- **Sector Regulator** – for enabling environment, ease of doing business, and making available spectrum at affordable rates
- **Competition Regulator** – to promote fair and free competition
- **Private Sector** – for open competition, investment in infrastructure, and expansion of coverage of services
- **Local Operators** – for extending the reach of services to rural and remote areas
- **Financial Institutions** – for long term investment in the networks, and credit to low income populace to increase revenue generation potential for them
- **Startups** – for digital applications to generate demand for broadband, and innovative ways to improve affordability of mobile technologies
- **Consumer Advocacy Groups and civil society** – for raising consumer awareness and protecting their rights

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## Technologies and mobile devices



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Existing technologies that have the potential to make affordable access a reality:

### Wireless cellular network:

- 3G WCDMA
- 4G LTE; and
- 5G

### Wi-fi:

- **Unlicensed Spectrum:** This has also paved the way for greater access to Internet services.
- **Low cost Mobile Devices:** The ownership of mobile-phones has been recognized as an empowerment tool by the Sustainable Development Goals (SDG).
- **Low cost Access Points:** Economies of scale in terms of increasing consumers will allow such service providers to pass on the benefits of such economies to the consumers thereby leading to affordable access points.

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## Technical, regulatory and commercial barriers



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**Access to international gateways:** regulatory frameworks are needed that introduce new models of sharing and collocation, and that encourage competition through lowering barriers to market entry thereby encouraging the provision of broadband Internet access

**Lack of reliable and affordable access:** Government and sector regulator have a role to play in ensuring that investment in backbone networks is affordable. Infrastructure sharing, co-ordination of civil works, increasing fibre reach are some of the ways to address this

**High investment:** Governments and regulators should make efforts to liberalise licensed norms and allow the industry to focus on innovation which will ultimately spill down to consumers in the form of good quality of service.

**High investment, operation and compliance costs:** Governments and regulators should make efforts to liberalise licensed norms and allow the industry to focus on innovation

**Low purchasing power, low usage and seasonal income:** governments in non-competitive telecom markets may need to regulate tariffs to ensure affordability across different population segments. Subsidisation may be one form of making ICT more accessible to the general consumer

**Taxation regimes in telecommunications:** Governments should ensure that they do not compromise on long term economic benefits by targeting short term revenue.

**Lack of grid:** Governments need to encourage the use of alternate renewable energy solutions to overcome these challenges.

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## Research innovative and incentive mechanisms



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**Public Wi-fi hotspots** Innovative models to increase the number of Wi-fi hotspots must be encouraged.

**Fixed broadband:** Intervention by the Government in the form of subsidies as well as public private partnerships can help setup the required infrastructure. Another model that can be used for proliferation is fixed wireless models using wireless unlicensed spectrum .

**Cable broadband:** makes economic sense as it continues to leverage existing infrastructure in the last mile.

**Voice over Wi-fi:** should be encouraged for voice and Internet Wi-fi services through one common platform

**Dissemination of local information:** Community and local applications can help both service providers as well as consumers to benefit by providing price information and product availability information.

**Digital transactions incentive:** tax subsidy or a deferred tax asset for certain schemes

**Awards:** Similar to the tax incentives, service providers as well as the Government can award users for carrying out digital transactions.

**Fiscal incentives** in the form of **lower rates of taxes for digital transactions**

**Awards** for use of digital platforms

**Government services:** to convert from a paper based service system to a digital one. to encourage more people to use online Government services, fee waivers or discounts may be considered.

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# Needs analysis



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## Identify the local requirements

- National Agriculture Market application
- Weather conditions information
- E-governance
- Direct benefits transfer
- Skill development applications in vernacular languages
- Money transfer
- Increased access for persons with disabilities(PwDs)
- Electronic health facilities
- Peer to peer (P2P) lending
- Social occasions and fares: Information about local events, fares etc

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# Potential of Unified Platforms



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Affordable access may be achieved by leveraging:

**Unlicensed spectrum and local operators:** Internet penetration in developing countries can be increased by improving last-mile connectivity.

**Digital platforms:** can help address vexing issues related to activities such as registration, authentication and payments in the provision of affordable Internet access.

**Use of biometric systems:** can be used as authentication mediums, thereby reducing the cost of acquiring customers for Internet service providers as well as increasing the ease of use for consumers.

**Payment interfaces:** Easy to use payment interfaces can help resolve issues related to payments for affordable Internet access platforms.

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# Innovative Business Models for Sustainable Connectivity



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Different models can be explored. These business models should address key issues such as de-licensing of spectrum, business viability and logistics to realise these goals.

- Infrastructure sharing
- Aggregation of small Wi-fi networks
- De-licensing of spectrum in rural/remote areas
- USO funding

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## Way Forward



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**Action 1: Enable collaboration between key stakeholders and new players**

**Action 2: Identify and invest in technologies and mobile devices-**

**Action 3: Remove regulatory, technical and commercial barriers**

**Action 4: Implement innovative incentive mechanisms to increase access and affordability**

**Action 5: Identify use-cases which may drive up the use of Internet and online services**

**Action 6: Leverage unified platforms to meet the goals of increased access and affordability**

**Action 7: Nurture and fund innovative business model for sustained connectivity**

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**THANK YOU!**