

REPORT 2016

BY THE m-POWERING DEVELOPMENT INITIATIVE ADVISORY BOARD

m-POWERING DEVELOPMENT INITIATIVE



TELECOMMUNICATION DEVELOPMENT BUREAU



This report was prepared by the Advisory Board Members of the m-Powering Development Initiative (<http://www.itu.int/m-powering>) launched by the Telecommunication Development Bureau (BDT), International Telecommunication Union (ITU), in 2012 to explore innovative and collaborative ways of harnessing the full potential of ICTs for the benefit of all worldwide.

Disclaimer

The designations employed and the presentation of material, including maps, do not imply the expression of any opinion whatsoever on the part of ITU concerning the legal status of any country, territory, city or area, or concerning the delimitations of its frontiers or boundaries. The mention of specific companies or of certain products does not imply that they are endorsed or recommended by ITU in preference to others of a similar nature that are not mentioned.

Please consider the environment before printing this report.

ITU 2016

All rights reserved. No part of this publication may be reproduced, by any means whatsoever, without the prior written permission of ITU.

REPORT 2016

BY THE m-POWERING DEVELOPMENT INITIATIVE ADVISORY BOARD

m-POWERING DEVELOPMENT INITIATIVE

<http://www.itu.int/m-powering>

PREFACE	1
FOREWORD	3
EXECUTIVE SUMMARY	5
Advocacy and Global Dialogue Action Plan	6
Innovation Action Plan	6
Resource Mobilization Action Plan	6
INTRODUCTION	7
1.1 Concepts and definitions	10
1.1.1 Mobile communications	10
1.1.2 Why use mobiles for development?	11
Mobile is expanding and affordable.....	12
A unique channel for the most marginalized	12
Purpose-built content	13
Meeting development goals	13
Facilitated monitoring and evaluation	14
1.1.3 Relevance of m-powering development to intergovernmental and institutional targets.....	14
1.1.4 Substantive conclusions from the m-Powering Development Report 2015	14
1.1.5 Key stakeholders	14
ADVOCACY AND GLOBAL DIALOGUE	17
2.2 Introduction	20
2.2.1 Core principles	20
2.2.2 Audience and voice.....	21
Audience	21
2.2.3 Advocacy strategy	22
2.3 ACTION 1 Champion m-Powering Development.....	24
2.4 ACTION 2 Ensure comprehensive and senior government commitment to the Initiative	25
2.5 ACTION 3 Prioritize measuring impact from the outset to improve the effectiveness of investments.....	26
2.6 ACTION 4 Recognize that context is crucial there is no one size fits solution	27
2.7 ACTION 5 Prioritize collaborationand integration across sectors	28
2.8 ACTION 6 Focus on identifying the ways in which opportunities can be scaled sustainably	29

INNOVATION	31
3.1 Introduction	33
3.2 Create a database of good practices and innovative models	35
outline specification.....	35
3.3 ACTION 2 Create an m-Powering Index.....	36
Outline specification	36
3.4 ACTION 3 Collaborate through forums and contests	37
3.4.1 International partnerships	37
3.4.2 The Digital Health partnership (WHO).....	37
Background	37
Objectives	38
Expected outcomes.....	38
3.4.3 Contests	39
Pilot contest implementation: World Health Assembly.....	39
Contest.....	39
Reuse of template.....	40
3.4.4 The Mobile Learning Week partnership (UNESCO).....	41
Exhibitions.....	41
RESOURCE MOBILIZATION.....	42
4.1 Introduction	44
4.2 ACTION 1 Access leadership.....	45
4.3 ACTION 2 Prioritize scalability and standardization	46
4.4 ACTION 3 Explicitly link m-Powering Development to SDGs.....	47
4.5 ACTION 4 Satisfy bottom up empowerment and local needs	48
4.6 ACTION 5 Outreach to other sectors.....	49
4.7 ACTION 6 Raise human capital	50
4.8 ACTION 7 Raise financial capital.....	51
ANNEX 1 WORKING GROUPS MEMBER OF M-POWERING DEVELOPMENT	52
ANNEX 2 M-POWERING DEVELOPMENT INITIATIVE: MATERIALS.....	54
Hardcopy media	54
Digital media	54
Social media	54

ANNEX 3 BASELINE QUESTIONNAIRE FOR M-INDEX DATABASE	55
ANNEX 4 OUTLINE FAQ/Q&A FOR THE M-POWERING DEVELOPMENT INITIATIVE	57
Overview questions	57
Advocacy messages	57
Affordability messages	58
Accessibility messages.....	58
Scalability messages	58
ANNEX 5 SAMPLE EVENT RESOURCES AND PROGRAMMES.....	59
WHO ITU Digital Health Summit.....	59
Draft timeline	59
Draft Agenda for ITU WHO Digital Health Summit.....	60
Planned advocacy and action sessions at ITU Telecom World 2015	62
Interactive Panel Session.....	62
Co-creation session	62
Innovators Exhibition	62
ANNEX 6 ADVISORY BOARD MEMBER BIOGRAPHIES	63

PREFACE

It is with great pleasure that I present the latest report of the m-Powering Development Initiative. Begun in 2012, the main objective of the Initiative is to harness mobile technologies to empower people, especially the poorest and most disadvantaged communities worldwide.

The report features key recommendations in the fields of Advocacy and Global Development, Innovation, and Resource Mobilization. In each area, concrete proposals are presented to all stakeholders, to support the new post-2015 development era. There is no doubt today that telecommunication/ICT is cross-cutting and an enabler for growth and development. For this reason, I believe that the work of the m-Powering Development Initiative can greatly help to achieve the 2030 Agenda for Sustainable Development.

The report indicates that mobile communication has a remarkable potential to improve people's lives. Now, we must make sure this potential can be realized. If it can be, so that the lives and prospects of millions of people will be changed for the better.

I would like to thank Mr Sam Pitroda, the Chairman of the m-Powering Development Initiative Advisory Board, and all Advisory Board and Working Group members for their excellent efforts in compiling this report.



Brahima Sanou
Director Telecommunication Development Bureau
International Telecommunication Union

ACKNOWLEDGEMENTS

This report documents the achievements of the three Working Groups of the m-Powering Development Initiative. In response to both the challenges and the opportunities from information and communication technology (ICT) contributions to political, social, economic and environmental development, the advice of the Working Groups support the work of International Telecommunication Union (ITU) by sharing recommendations within the framework of the m-Powering Development Initiative.

ITU would like to thank Mr Sam Pitroda, Chairman of the m-Powering Development Initiative Advisory Board, for his continuing leadership and oversight resulting in the publication of this new report. ITU would also like to thank the Chairman of each Working Group for their advice, guidance and efforts in compiling this report.

The Chairmen of the Working Groups are: Mr Tim Unwin, Chairman of the Advocacy and Global Dialogue Working Group; Ms Kathy Brown of ISOC, Chairman of the Innovation Working Group; and Mr Sam Pitroda, Chairman of the Resource Mobilization Working Group.

ITU would like to thank the m-Powering Development Initiative Advisory Board Members of each Working Group for their hard work, commitment and recommendations in producing the contents of this report. Working Groups Members can be found in Annex 6 of this report.

FOREWORD

Mobile communications and the Internet represent the two driving forces that have shown their power to shape lives and economies everywhere. The smartphone era brings them together and makes their impact unassailable. Now, we are on the verge of seeing another development: the delivery of vital services via mobile and the web. For millions of people, this has the potential to be truly transformative.

The Director of the Telecommunication Development Bureau (BDT) of the International Telecommunication Union (ITU) established the m-Powering Development Initiative as an international, multi-stakeholder platform that brings together disparate actors, programmes and strategies, which make it possible to see a way forward.

To implement this Initiative, the Telecommunication Development Bureau Director invited experts from government, private sector and academia to form the first m-Powering Development Initiative Advisory Board. I congratulate the ITU on this fine Initiative and I am proud to be involved as Chairman of the Advisory Board.

After initial consultations for the new Initiative, Working Groups were established to analyze developments across many different sectors including: m-Health, m-Learning, m-Commerce, m-Governance and m-Sport. Special attention was also paid to the construction and evaluation of possible business models in these areas and to the need for wider advocacy in mobile. Finally, the groups were asked to report on existing experiences. The m-Powering Development Report 2015 emerged from all these efforts as a comprehensive review.

Now, the Advisory Board has decided that we collectively need recommendations for concrete, practical action. Three Working Groups - for Advocacy and Global Dialogue; Innovation; and Resource Mobilization were convened in 2015 to address this requirement which crosses all sectors to provide a clear Roadmap to help us articulate, share and facilitate the promise of the m-Powering Development Initiative.

We are at the beginning of a long road. The global mobile communications community and all the other stakeholders involved need to come together to make this happen. Above all, we need global leaders and decision makers to sit up and take notice of what is happening in this technological world, and then to act on making it happen in their own spheres. If we can do this, the m-Powering Development Initiative will go from words on a page to making a major difference in the lives of millions of people around the world.

Sam Pitroda

Chairman

m-Powering Development Initiative Advisory Board

EXECUTIVE SUMMARY

This report details a series of recommendations to implement the ITU m-Powering Development Initiative. The Initiative was developed in 2012 by the ITU Telecommunication Development Bureau (BDT). It is designed to encourage and facilitate the large expansion in mobile communications use to address inequalities and stimulate economic and social development, especially in those communities around the world who lack access to services of all kinds.

The definition of mobile in m-Powering Development is wide ranging and can include phones, tablets and laptops on 2G, 3G or other networks, but with a common theme of user mobility. Using the reach and capability of mobile communications, m-Powering Development ideas could dramatically benefit communities and bring additional benefits in terms of efficiency, cost-effectiveness and sustainability.

The practical issues of growing and developing this concept in the short term is the main subject of this report.

Some 18 items have been developed by three Working Groups (responsible for Advocacy and Global Dialogue, Innovation, and Resource Mobilization, respectively) under the guidance of the Advisory Board of the m-Powering Development Initiative. Building on the m-Powering Development Initiative Report 2015, the Working Groups have been given objectives of developing specific approaches in terms of concrete recommendations.

The report is now available for public, private sector and NGO stakeholders to develop. Although the Working Groups focused on different aspects of m-Powering Development, these Action Plans show a high degree of congruence in their outcomes particularly in the championing, engagement, collaboration, and emphasis on scalability of m-Powering Developments. In particular, the m-Powering Development Initiative stresses advocating decision makers and leaders to mandate substantive programmes as well as creating

awareness amongst communities and users. This is important as the range of possible stakeholders and interests is extensive.

Moreover, since a cross-sectoral emphasis is frequently made in the m-Powering Development Initiative, we may need to take account of operating procedures and regulatory regimes in other sectors.

Advocacy and Global Dialogue Action Plan

In Advocacy and Global Dialogue, the goal is to show the social, financial and economic benefits of investing in mobile bearing in mind that a global dialogue should be organized through the development of platforms in which all stakeholders could meet and exchange. Amongst other actions, it emphasizes leadership engagement and collaboration across the global community.

Innovation Action Plan

In Innovation, the goal is identifying the emerging potential of dynamic mobile innovation. It is widely recognized that scalability of projects remains a key issue. Here, practical steps can be taken to highlight good practices and reliable case studies that can be brought to wider attention particularly through the use of events and online forums.

Resource Mobilization Action Plan

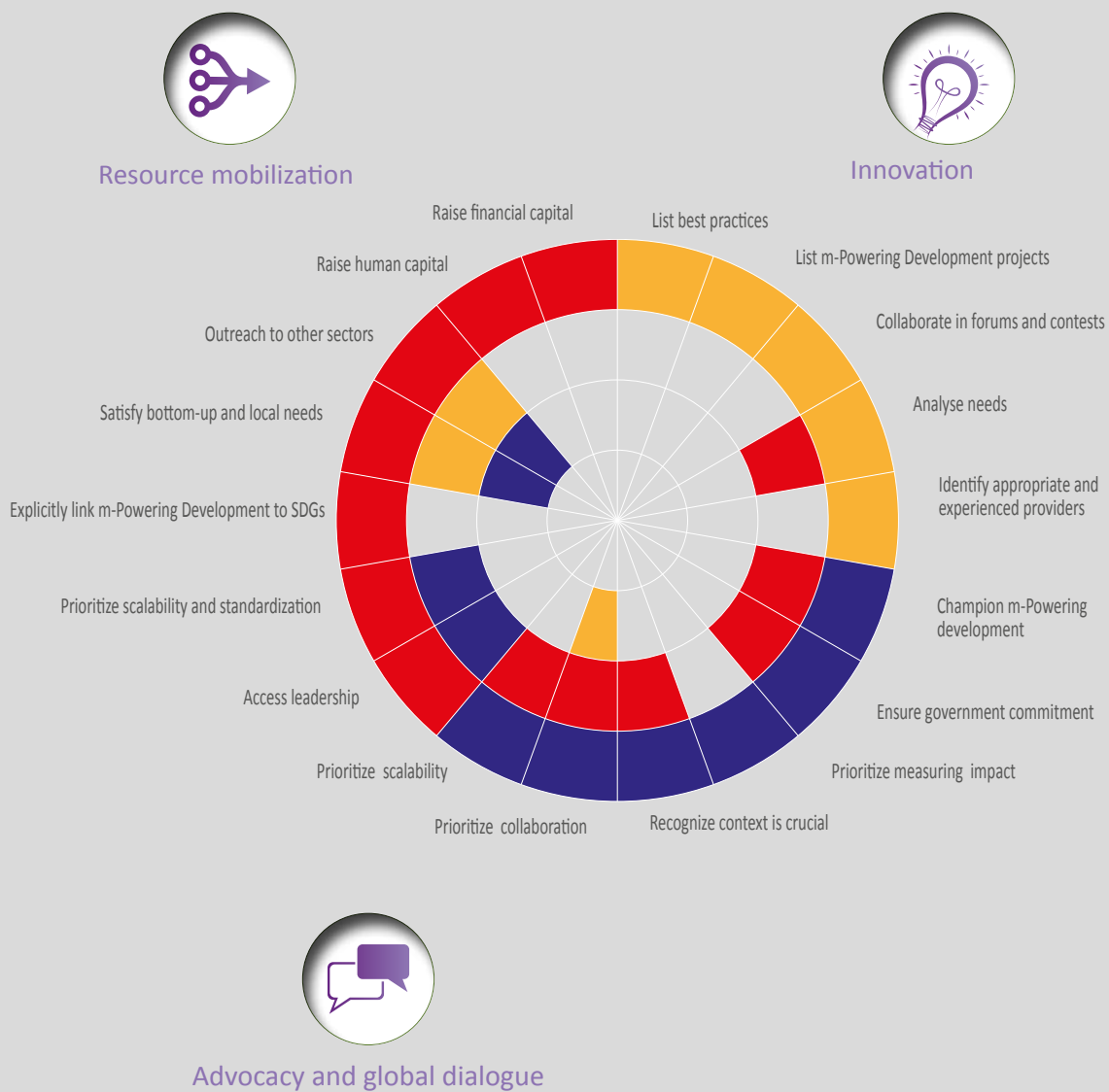
In Resource Mobilization, the goal is to explore additional funding models and resources for m-Powering Development Initiatives. The message is one of leadership engagement and outreach, identification of platforms, and access to human as well as financial capital.

1

INTRODUCTION



FIGURE 1 THE M-POWERING DEVELOPMENT WORKING GROUPS AND RECOMMENDATIONS



The International Telecommunication Union (ITU) m-Powering Development Initiative was launched by the ITU Telecommunication Development Bureau (BDT) in 2012 to explore innovative and collaborative ways of harnessing the full potential of mobile communications especially for the benefit of the most marginalized communities in the world. Furthermore, it is expected that mobile will stimulate economic growth worldwide.

The objective of the m-Powering Development Initiative is to create a framework to introduce advanced mobile services and applications to support development especially in m-Health, m-Learning, m-Commerce, and m-Governance. As a result, there are many potential stakeholders interested in the potential for delivering services via mobile communications networks. Equally, there are many pilot and small-scale projects that may show promise for further development. It would be wrong to assume that innovation must necessarily emerge from traditional sources of mobile development such as service providers and vendors given important developments, such as m-Banking, that have often taken place outside this sphere.

However, much of the field remains fragmented and potential users and communities are unaware of activities worldwide. Furthermore, many programmes exist within relatively “siloes” areas such as health and education. Clearly there are specialist skillsets within these areas normally unavailable to the telecommunications community that are required for development. However, development entirely within the specialist silos themselves may hinder more widespread adoption through impeding economies of scale.

The m-Powering Development Initiative Advisory Board is composed of individuals of high caliber who have considerable expertise and experience across all the areas that are relevant to this Initiative and can bring important and insight from across applications and communities. They include service providers, policy makers, regulators, academics and development specialists. The first round of work in this Initiative culminated in the publication of a report in January 2015. The 2015 report regroups detailed evaluations carried out by five Working Groups especially set up for the purpose: respectively, m-Health, m-Learning, m-Commerce, Business Models, and Advocacy for Mobile. m-Governance was also addressed.

Following the approval of the 2015 report and combining the efforts of the Working Groups, the Advisory Board pursued the means of practical implementation of the m-Powering Development Initiative objectives. This resulted in the establishment of three Working Groups: Advocacy and Global Dialogue, Innovation, and Resource Mobilization.

These Working Groups have provided substantive recommendations to progress the m-Powering Development Initiative concept forward. These recommendations show a high degree of congruence, particularly in championing, engagement, collaboration, and an emphasis on scalability of m-Powering Developments. Additionally, Annex 4 discusses the breadth and depth of the m-Powering Development Initiative messaging in terms of key questions posed to the community.

1.1 CONCEPTS AND DEFINITIONS

1.1.1 MOBILE COMMUNICATIONS

For the purposes of the study, the concept of the m-Powering Development Initiative in terms of mobile communications is defined relatively widely and largely on a technology-agnostic basis in order not to foreclose significant developments on the roadmap ahead.

For example, the 2015 Report discussed m-Learning/m-Education as “all kinds of education and learning undertaken through the use of mobile devices.”¹ These would most commonly be mobile phones and tablets but also include laptops and other devices where appropriate. Likewise, the definition includes use of 2G and 3G mobile communications. Consequently, overall definitions of what is involved in m-Powering Development may remain open to more precise interpretation although we assume the involvement of portable devices through which services may be delivered, and the physical sense of mobility rather than a specific technological preference.

The global expansion in Internet connectivity and mobile communications, as evidenced by the most recent ITU statistics², is the principal driver for the m-Powering Development Initiative. Reach and delivered bandwidth are rapidly increasing and terminals are ever more capable of sophisticated processing to support such applications, as secure m-Commerce and reliable interactive video services. ITU analyses³ indicate many trends continuing to improve but in some cases disparities widening, leading to least developed countries seeing relatively less progress:

- The proportion of the global population covered by mobile-cellular networks is now over 95 per cent.
- The number of Internet users is estimated to have grown almost as rapidly as that of mobile cellular subscriptions, with over 40 per cent of the world’s population now estimated to be using the Internet.
- Growth in the penetration of active mobile-broadband subscriptions has, however, been very sharp, reflecting the wider availability of mobile-broadband networks, falling prices and the rapidly growing use of smartphones and tablets. Individual use of Internet and household access to it have continued their steady rates of growth.

1 m-Powering Development 2015 Page 13

2 See for example <http://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2015.pdf>

3 Measuring the Information Society 2015 available at: <http://www.itu.int/en/ITU-D/Statistics/Pages/publications/mis2015.aspx>



- Closer consideration, however, shows that there are still considerable variations with substantial digital divides between different regions, and particularly between countries in different development categories.
- Digital divides are found within, as well as between, countries, and result from differences in the quality of available networks as well as basic connectivity. In many developing countries, for example, there are substantial differences in telephone and Internet penetration between urban and rural areas, often exacerbated by the lack of broadband capacity in the latter. Other divides exist between men and women in many countries, on the basis of income, on the basis of educational attainment, and with other factors affecting the inclusion or marginalization of particular social groups, for example, persons with disabilities.
- The capabilities of networks and devices have continued to grow extremely rapidly, doubling about every two years. The quality of ICT networks and devices, particularly in terms of bandwidth and speed of connectivity, has therefore also grown very rapidly, with broadband and even high-speed broadband networks becoming the norm in developed countries.
- Smartphones and tablets are displacing basic mobile phones and traditional PCs for many users, making connectivity both more mobile and more capable, in a process that will be strengthened by the spread of LTE networks. Social media services, have become crucial drivers of demand for connectivity.

1.1.2 WHY USE MOBILES FOR DEVELOPMENT?

A very important part of the message we wish to communicate to all stakeholders is: “why mobile?”.

Mobile is expanding and affordable

As noted above, mobile coverage has already expanded to near ubiquitous levels. The growth in mobile- cellular (voice and SMS) and mobile-broadband subscriptions has been particularly rapid, with the deployment of mobile networks in developing countries and adoption by users of mobile devices in preference to those requiring fixed networks.⁴ Coverage gaps remain however. Even in this growth, people in least developed countries continue to fare relatively poorly in their access to the Internet and mobile services.

ITU estimates that 3G coverage reached 69 per cent of the world population in 2015, and that 43 per cent of the global population are Internet users. This suggests that, today, mobile broadband has the potential to bring online a quarter of the global population, and to do so at broadband speeds that enable access to advanced online services such as e-Education, e-Health and e-Government. Given that mobile-broadband infrastructure is already largely in place and will be expanded in the coming years, affordability remains the key to unlocking the potential of broadband services in many developing countries.⁵

Affordability - long seen as an impediment to ICT take-up - in both services and handsets is driving adoption. In LDCs, the mobile-cellular price basket continued to fall, down to 14 per cent of GNI p.c. by end 2014, compared with 29 per cent in 2010.⁶ Mobile broadband services are also increasingly affordable everywhere. Price reductions have also been driven by local handset manufacturers who focus specifically on these markets and develop products that are both affordable and meet the specific needs of consumers. This includes differentiating offers with local content, apps and language support. Innovative pricing bundles where users choose packages and mixes of service offerings is also driving adoption.⁷

A unique channel for the most marginalized

The unconnected population is predominantly rural, with low incomes and high levels of illiteracy creating barriers to mobile Internet adoption. For many people mobile is the only ICT channel through which they can access digital information – because mobile is small, affordable, anywhere and anytime. Mobiles can have a particular advantage in accessing marginalized groups, including women, remote communities, people with disabilities, refugees and displaced persons.

Various projects have demonstrated the way in which the potential benefits of mobile can be structured to benefit the poorest and most marginalized in a wide range of different contexts. However, it is important that initiatives directly seek to address the needs of these marginalized communities. Universal accessibility

4 Measuring the Information Society Report 2015 Page 1

5 Measuring the Information Society Report 2015 Page 118

6 Measuring the Information Society Report 2015 Page iii

7 Measuring the Information Society Report 2015 Page iii

needs to be prioritized. Operators, governments, regulators as well another stakeholder, all have a role to play in addressing these barriers and improving the reach and affordability of mobile services.

Purpose-built content

There is a growing set of resources available via mobile, content specifically developed for mobile and valuable for development.

People around the world are currently accessing life-enhancing services and information, as well as 3.5 million apps — enabling communication, creating the ability to transfer money, acting as a platform for education and healthcare services and giving people the tools to run their own businesses. The quality of resources on mobile devices is increasing and will continue to do so.

Meeting development goals

Mobiles are a vital part of engaging effectively with the UN Sustainable Development Goals (SDGs).



All m-Powering Development Initiative advocacy messages may be linked to the SDGs. It is the belief of the Advisory Board that mobile communications should have more explicit and integrated coverage throughout the SDGs. Many of the SDGs will benefit from the potential that mobile can deliver for development.

Facilitated monitoring and evaluation

Mobiles provide a unique opportunity for gathering data and knowledge for development through rigorous monitoring and evaluation and building an evidence base for effective interventions.

Mobiles allow relevant data to be collected and analyzed more quickly, more cheaply, and at a greater range of scales than ever before. This provides a diversity of opportunities for building appropriate interventions, based on improved understanding of effectiveness. A mobile-enhanced evidence base contributes to validated learning and the overall maturity of the sector.

1.1.3 RELEVANCE OF M-POWERING DEVELOPMENT TO INTERGOVERNMENTAL AND INSTITUTIONAL TARGETS

The m-Powering Development Initiative has significant relevance to major development initiatives either implicitly or explicitly. These initiatives include WSIS, the Broadband Commission for Digital Development (convened jointly by ITU and UNESCO), the UN Millennium Development Goals, and - as argued in this report - the UN Sustainable Development Goals, amongst others. Within ITU, the Connect 2020 vision has also been launched. 2015 has been a landmark for many aspects of development targets and strategies with the review and evaluation of a number of major initiatives.

1.1.4 SUBSTANTIVE CONCLUSIONS FROM THE M-POWERING DEVELOPMENT REPORT 2015

The m-Powering Development Initiative Report 2015 highlighted many conclusions including: a growing need to pursue advocacy to increase awareness of the potential for this concept; a requirement for an enabling policy and regulatory environment; a need to be “holistic” in dealing with m-Powering Development strategies; a clear need for scalability; and an emphatic requirement for practices to be rooted in evidence and outcomes.

1.1.5 KEY STAKEHOLDERS

The three Working Groups identified and presented a non-exhaustive list of key stakeholders involved in m-Powering Development. Given the cross-sectoral nature of the m-Powering Development Initiative the number of different interests and stakeholders is extensive. It includes international organizations, policy and decision-makers at national government levels emerging from many different sectoral responsibilities, civil society organizations and NGOs, end-user beneficiaries, national and global private sector companies, academics, researchers and civil servants. Particular sectoral interests also exist. It is important to note that in many cases, there are regulatory requirements specific to individual sectors. Thus, m-Powering Development may need to take account of multiple regulatory regimes and requirements.

TABLE 1 KEY IDENTIFIED STAKEHOLDERS

STAKEHOLDER	RESPONSIBILITIES	m- POWERING DEVELOPMENT INTERESTS
Government Agencies	National planning and economic development at national and regional levels; safety and security; health; education; social security	A component of national socio-economic development Efficiencies and cost saving through cross-sectoral developments and in direct m-Governance services to end users
ICT Ministry	Developing ICT development plans and policies, including spectrum allocation	Support greater access, connectivity and the role of communications in national policy
Other sectoral ministries	Specific sectoral responsibilities and development	Improved services for stakeholders, social and economic development
National Regulatory Authorities (NRAs)	The creation and management of licensing and authorization regimes for infrastructure and technologies, including spectrum Industry conduct and competition	Improved services for stakeholders, social and economic development
Other sectoral regulators	Specific responsibilities in authorization, monitoring and licensing of sector	Improved services for stakeholders
Other sector-specific groups	Wide range of involvement including employee representation groups and unions, patient associations, consumer associations	Constituency interests
UN	The support of capacity building initiatives, sustainable development and poverty alleviation	A possible major tool to deliver Sustainable Development Goals (SDGs)

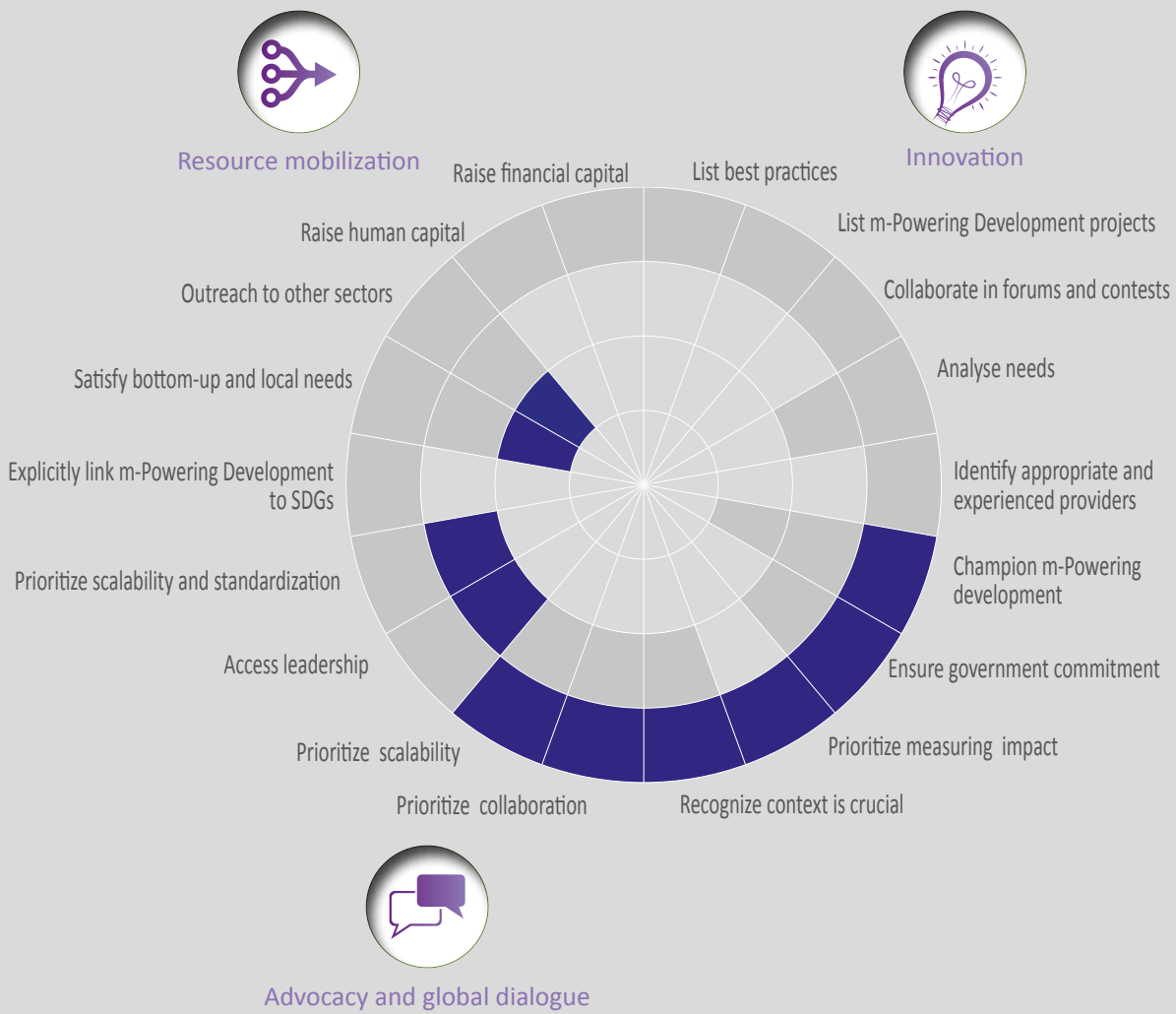
STAKEHOLDER	RESPONSIBILITIES	m- POWERING DEVELOPMENT INTERESTS
International NGOs	Wide ranging missions such as in health and education	New tool to help disadvantaged
Local NGOs	The support of local socio-economic needs	New tool to help disadvantaged
Local government agencies	The identification of requirements for technologies and services to support development of ICT strategies and policies	Deploy technologies to support delivery of government services; supports training
Financial fund holders	Major financial institutions, bi-lateral and multi-lateral donors, foundations all may be responsible for funding projects	New funding opportunity with significant benefits at lower cost for target groups
Private sector - ICT suppliers	The development of new technologies and services to meet customer needs; the delivery of technology and infrastructure deployment	Lead on deployment of infrastructure, technologies and services; provides training support for users/customers
Private sector - content suppliers	The delivery of global educational and infotainment content	New audiences and market reach
Private sector - other	The delivery of e.g. retail and banking products and services	Improved products and services to customers at greater efficiencies and cost saving.
Entrepreneurs	The development of new products and services to meet perceived market gap	Business growth through new products and new customers
Users and immediate communities	N/A	Possible major tool for access to services and socio-economic prospects

2

ADVOCACY AND GLOBAL DIALOGUE



FIGURE 2
ADVOCACY AND GLOBAL DIALOGUE



ACTION	INITIATIVE
<p>Champion m-Powering Development with decision makers</p>	<ul style="list-style-type: none"> • <i>Raise awareness of the potential and success of mobile initiatives</i> • <i>Advocate for m-Powering development initiatives across government ministries</i> • <i>Advocate for regulatory environments that facilitate mobile innovation</i>
<p>Ensure comprehensive and senior government commitment to the m-Powering Development Initiative</p>	<ul style="list-style-type: none"> • <i>m-Powering Development initiatives require cross-government engagement to ensure that all relevant Ministries are involved</i> • <i>Usually, at a minimum, the following Ministries should be involved in planning and delivering such initiatives: ICT/ Telecommunications, Infrastructure (Electricity), Finance, relevant line Ministry (such as Health, Education or Rural Development)</i>
<p>Prioritize measuring impact from the outset to improve the effectiveness of investments</p>	<ul style="list-style-type: none"> • <i>Measuring impact is key to learning which initiatives are working and which require an alternative approach</i> • <i>Evidence of real outcomes should be provided through rigorous monitoring and evaluation</i>
<p>Recognize that context is crucial – there is no one size fits all solution</p>	<ul style="list-style-type: none"> • <i>Technologies and tools must be appropriate and relevant for the context in order to be effective</i> • <i>Contextualized content in local languages is more effective at engaging a wider audience</i> • <i>Solutions which work in one context cannot be implemented elsewhere, without adaptations that take the local context into account</i>
<p>Prioritize collaboration and integration across sectors</p>	<ul style="list-style-type: none"> • <i>Engage across sectors in multi-stakeholder partnerships</i> • <i>Emphasize holistic approaches to avoid fragmentation</i> • <i>Demonstrate the benefits of joined-up strategies for shared learning</i> • <i>Enhance capabilities within existing structures</i>
<p>Focus on identifying the ways in which opportunities can be scaled sustainably</p>	<ul style="list-style-type: none"> • <i>Scalability enhances sustainability and should be considered from the outset</i> • <i>Universal access across socio-economic strata enhances opportunities for all</i>

2.2 INTRODUCTION

The goal of this report is to show the social, financial and economic benefits of investing in m-Powering Development and especially to advocate that these activities are not only supporting economic and social development, but also reducing inequality by enabling access for the most disadvantaged people and communities in the world. At its heart and in common with the other Working Groups, it sees the development of a major global dialogue organized through platforms in which all stakeholders may meet and exchange ideas and experiences. These actions, for example, see substantive common interest with Actions 1, 2, and 5 of the Innovation report.

According to UNESCO's definition, advocacy is the deliberate process, based on demonstrated evidence, to directly and indirectly influence decision makers, stakeholders and relevant audiences to support and implement actions. In practice it can take several forms such as lobbying, public relations, social mobilization, campaigning, policy development, awareness raising, empowerment, media work or communications. The basis of advocacy actions should be knowledge. Knowledge management is about getting the right information to the right people at the right time, therefore knowledge of what ICT and specifically m-Powering Development can bring to poverty alleviation and sustainable development, is paramount to the success of advocacy actions.

The m-Powering Development Initiative Advisory Board can also draw on its very wide stakeholder representation to engage in targeted advocacy actions in the same way that the UN has done to achieve the Millennium Development Goals⁸, and is expected to do to fulfil the UN Sustainable Development Goals. As stated in the UNESCO advocacy toolkit⁹, in addition to the recognition of the individual advocating role (i.e. the right person to achieve the right goal at the right time), advocacy requires the building of relationships (personal, public and institutional) and the securing of partnerships to help organize people and groups to achieve the set goal.

2.2.1 CORE PRINCIPLES

The following principles have been agreed by the Working Group:

- The importance of doing a few things well – always working at the highest standard.
- Ensuring a focus on the ITU's core competences and remit – playing to our strengths.
- Working on a two year planning cycle and also considering outline ideas for a further two year period.
- Being realistic regarding the budget available.
- Working collaboratively with other organizations so as to reduce duplication and overlap, and maximize synergies.
- Drawing on the expertise and resources of the Members of the Working Group.

8 www.un.org/millenniumgoals/advocates/index.shtml

9 www.unicef.org/evaluation/files/Advocacy_Toolkit.pdf

- Ensuring clarity regarding the value proposition and all the key messages – how mobile can make a specific difference (politically, socially, and economically).

2.2.2 AUDIENCE AND VOICE

Audience

The m-Powering Development Initiative may target many different audiences with its advocacy messaging. Many legitimate stakeholders may be involved, especially if a cross-sectoral initiative is indicated. However, cognizant of key principles, especially doing a few things well and concentrating on the areas where the ITU has a distinct competitive advantage, the following segmentation of the audiences is recommended:

- Primary audience: senior government officials and other UN agencies.
- Secondary audience: major private sector stakeholders, major financial institutions, bilateral and multilateral donors, foundations, and international NGOs (INGOs).
- Tertiary audience: other organizations, local NGOs.

The primary audience focuses on the context within which the ITU's competitive advantage is situated. Additional points regarding audience suggest the following:

- The possibility for also targeting influential individuals: CEOs of major corporations, heads of other UN bodies, heads of large INGOs, heads of development banks and innovators and entrepreneurs, as a way to communicate and influence from different angles.
- A general perspective that generic campaigning should be avoided – many others are already doing this and it is not the most strategic use of limited resources.
- Resources need to be prepared that facilitate effective communication with each of the target audiences.

Voice

An area for future work by the Advocacy and Global Dialogue Working Group is to consider ways through which the Initiative can engage with the voices of different stakeholder groups, and particularly younger audiences, the private sector, and innovators. In the first instance, the following is recommended:

- People are often influenced more by their peers than by others. Hence, we should engage as many voices as possible in sharing our messages. Ministers are more likely to be convinced by other Ministers; successful innovators and entrepreneurs can inspire and enthuse others to engage.
- Therefore a diversity of speakers and participants should be involved through different platforms where m-Powering for Development can be promoted.
- Careful thought should be given about ways through which youth can be engaged.

2.2.3 ADVOCACY STRATEGY

The Working Group identified two distinct forms of advocacy, each of which is relevant at different stages of the advocacy process:

- In the first instance, it is important to convince leaders why they should consider using mobile technology for development (this is the value propositions that make the case for why people should consider investing in / promoting the use of mobile for development). This rationale was indicated in the Introduction to this Report (page 10).
- Once they have decided to engage in the use of mobile technologies for empowering development, a second set of advocacy messages on how this should be done most effectively is necessary (this is the guidance on how to undertake mobile for development initiatives – the good practice principles that should be adopted). This rationale is indicated in this Section.

It is important to note that there are many different messages that could be adopted within the remit of advocating for m-Powering Development. However, the Working Group is committed to the core principle of doing a few things well and always working to a high standard. This is reflected in targeted messages from this Working Group.



The messaging strategy is based on the core principle of not trying to do everything, focusing on what the ITU does best and where it has a competitive advantage. There are limited resources at present available for m-Powering Development but a high commitment to maintaining quality in the activities undertaken. Close liaison with the resourcing and innovation Working Groups will be important here, and the recommendation below take into consideration varying resourcing levels.

There is an on-going discussion regarding the core activities that the m-Powering Development Initiative should undertake, bearing in mind the remit, principles and resources. The current strategy focuses primarily on targeted participation at significant existing international events.

This will take place at two levels:

- A small number of major international events and conferences where specific high-level sessions will be held. Target events are further discussed in the next section.
- A larger number of events where Members of the m-Powering Development Advisory Board are already planning to be in attendance and can speak about the Initiative and its core messages. This requires considering priority events for representation by also empowering Advisory Board Members to speak regarding the advocacy messages whenever they have the opportunity.
- It is necessary to work collaboratively with other international organizations to maintain efficiency and maximum exposure. It is recommended that the main sector focus should be on m-Health and m-Learning for the first two years. In the next two year period (2018-19) there may be a focus on m-Agriculture (joint session with FAO) and m-Finance (joint session with World Bank).

2.3

ACTION 1

CHAMPION M-POWERING DEVELOPMENT

- *Raise awareness of the potential and success of mobile initiatives*
- *Advocate for m-Powering development initiatives across government ministries*
- *Advocate for regulatory environments that facilitate mobile innovation*

m-Powering Development Initiatives require advocacy at the highest levels of government, in order to influence policy and regulations. This requires leadership and personal investment, which rest not only on enthusiasm and vision, but can be demonstrated through evidence and measurable outcomes.¹⁰

For example, there are some notable successes in the area of m-Governance and potential for further expansion through awareness-raising and advocacy for its benefits (increasing efficiency and entrepreneurialism, decreasing corruption and bureaucracy). The potential for multi-stakeholder partnerships (MSPs) to increase the value of government services, is a particular area where ministers can demonstrate the benefits of m-Governance without significant public investment, and contribute to the evidence base.¹¹

10 m-Powering Development Initiative Report 2015 Pages 3-4, 10-12, 51-54, 59-60.

11 m-Powering Development Initiative Report 2015 Pages 43-46.

2.4

ACTION 2

ENSURE COMPREHENSIVE AND SENIOR GOVERNMENT COMMITMENT TO THE INITIATIVE

m- Powering Development Initiatives require cross-government engagement, to ensure that all relevant ministries are involved

- *Usually, at a minimum, the following Ministries should be involved in planning and delivering such initiatives: ICT/telecommunications, infrastructure (electricity), finance, relevant line ministry (such as health, education or rural development)*

One of the greatest challenges in delivering successful ICT initiatives is a lack of integration between different government ministries. For any m-Powering Development efforts, it is therefore essential for all relevant government departments to engage actively in the design and implementation of the Initiative. The ICT/telecommunication ministry brings the appropriate technical expertise; the infrastructure ministry ensures that electricity is provided and opportunities of shared infrastructure are maximized; the finance ministry needs to ensure that appropriate funding and financial guarantees are available; the line ministry (such as health, education, or rural development) provides the content specificity and engagement with the most important stakeholders in the private sector and civil society.

2.5

ACTION 3

PRIORITIZE MEASURING IMPACT FROM THE OUTSET TO IMPROVE THE EFFECTIVENESS OF INVESTMENTS

- *Measuring impact is key to learning which initiatives are working and which require an alternative approach*
- *Evidence of real outcomes should be provided through rigorous monitoring and evaluation*

A strong evidence base for the impact of m-Powering Development Initiatives provides a foundation for effective advocacy. Where that evidence is already available, real outcomes should be pointed to, and where it is uncertain or yet to be established, it is important that any supported projects have integrated plans for measuring their impact. This requires rigorous monitoring and evaluation, and may require testing in line with sector-specific protocols and expectations (such as health).¹²

For example, demonstrating the ways in which m-Health can lead to positive outcomes is crucial for gaining the trust of both regulatory bodies and health-care providers. m-Health pilot projects sometimes struggle to justify their investment with clear evidence. Engaging health professionals with the rigorous scientific evidence to which they are accustomed, for example through randomized controlled trials (RCTs) where appropriate, will earn their trust and provide an evidence base for more widespread scalable initiatives. Additionally, it is important that the evaluation takes into account the views of as many stakeholders as possible, including patients, in order to provide a satisfactory service in a highly sensitive and personal sector.¹³

12 m-Powering Development Initiative Report 2015 Pages 6, 12, 14, 19, 44, 53, 57, 69.

13 m-Powering Development Initiative Report 2015 Pages 1-2, 9-10.

2.6
ACTION 4
RECOGNIZE
THAT CONTEXT IS CRUCIAL
THERE IS NO
ONE SIZE FITS
SOLUTION

- *Technologies and tools must be appropriate and relevant for the context in order to be effective*
- *Contextualized content in local languages is more effective at engaging a wider audience*
- *Solutions which work in one context cannot be implemented elsewhere without adaptations that take the local context into account*

Contextualization of tools, resources and content is vital to introducing m-Powering Development Initiatives. Effectiveness and inclusion are enhanced by localizing key messages into as many languages and cultural contexts as appropriate, reinforcing the notion that the benefits of innovation are for everyone, not just those who speak a certain language, or have received certain education. It is important to customize and adapt technologies and tools for different contexts (even within a country) to reach a wider audience.¹⁴ Context, though, goes beyond just language, and it is important that wider cultural, gender, religious and ethnic dimensions are considered when implementing such initiatives.

As an example, consider the scenario that independent m-Learning is an important vehicle of social mobility where education systems are overstretched, or young-people are expected to join the workforce before they have gained a high level of skills. Yet, for many aspiring learners, there are limited resources available in their vernacular language. Adapting learning resources for different contexts can drive innovation and entrepreneurship, and enhance livelihoods for ambitious young people in emerging economies.¹⁵

14 m-Powering Development Initiative Report 2015 Pages 18, 19, 35, 58, 70.

15 m-Powering Development Initiative Report 2015 Pages 18-19.

2.7

ACTION 5

PRIORITIZE COLLABORATION AND INTEGRATION ACROSS SECTORS

- *Engage across sectors in multi-stakeholder partnerships*
- *Emphasize holistic approaches to avoid fragmentation*
- *Demonstrate the benefits of joined-up strategies for shared learning*
- *Enhance capabilities within existing structures*

Bringing together disparate communities of stakeholders across sectors requires a strategic approach that envisions common areas for collaboration and learning. Holistic approaches to mobile initiatives based on common standards, interoperability, and modular platforms can avoid fragmentation and obsolescence in a rapidly changing technology climate. Enhancing existing capabilities within systems, including investing in the human resources already present (such as doctors and nurses for m-Health, teachers for m-Learning) is more effective than layering on new projects and initiatives. Integrated approaches that respect and respond to the individual areas of expertise of different stakeholders maximizes the chance of positive impact.¹⁶

Integrating m-Education should focus on enhancing the capabilities of teachers and principals, rather than supplanting them with technology. This requires listening to and respecting their commitment and experience, and developing collaborative and¹⁷ systematic strategies to enhance learning outcomes. Examples of scaled and successful m-Education initiatives are not abundant, but evidence suggests that systemic, long-term inputs are most transformative.

M-Commerce requires the collaboration of a range of stakeholders from mobile, banking and regulatory sectors, as well as other commercial areas. A joined-up approach is crucial for encouraging an environment equipped for the high uptake and scalability that is required to make such initiatives effective. The competitive nature of the sectors and the opportunity for profit should be balanced with strong leadership that can nurture and develop a whole system rather than favouring a few. An integrated approach across sectors helps address the challenges of interoperability, standards-based technology and future-proof systems that emphasize security and privacy.¹⁸

16 m-Powering Development Initiative Report 2015 Pages ix, 3, 18, 47, 57.

17 m-Powering Development Initiative Report 2015 Pages 14-16.

18 m-Powering Development Initiative Report 2015 Pages 20-34, especially 33-34.

2.8

ACTION 6

FOCUS ON

IDENTIFYING THE WAYS IN WHICH OPPORTUNITIES CAN BE SCALED SUSTAINABLY

- *Scalability enhances sustainability and should be considered from the outset*
- *Universal access across socio-economic strata enhances opportunities for all*

Dependency on scale is about expansion and inclusion of m-Powering innovations to as wide a group of users as possible. The greater the scale that can be reached, the greater the investment that can be justified, due to the likely impact of the initiative. Opportunities that can be brought to scale have great potential to enhance the capabilities of people from diverse economic backgrounds, and consolidate markets for MSPs that can invest in substantial change.¹⁹ Far too often pilot projects are developed that do not take into full cognizance in their design the cost implications of going to scale, and hence it is scarcely surprising that they never go to scale.

As an example of this consider the context of m-Payments, most notably exemplified by mPesa in Kenya, that have received widespread attention with m-Powering development. Several initiatives are now operating at significant scale. Further work should be done to ensure that through improved connectivity, accessible software and sustainable pricing structures, m-Payments help create an enabling environment that enhances livelihoods and opportunities across socio-economic groups. This has potential to create more opportunities for all, especially where regulatory environments protect the interests of the most marginalized.²⁰

19 m-Powering Development Initiative Report 2015 Pages 2, 10-11, 43-44, 58.

20 m-Powering Development Initiative Report 2015 Pages 24-27, 33-34.

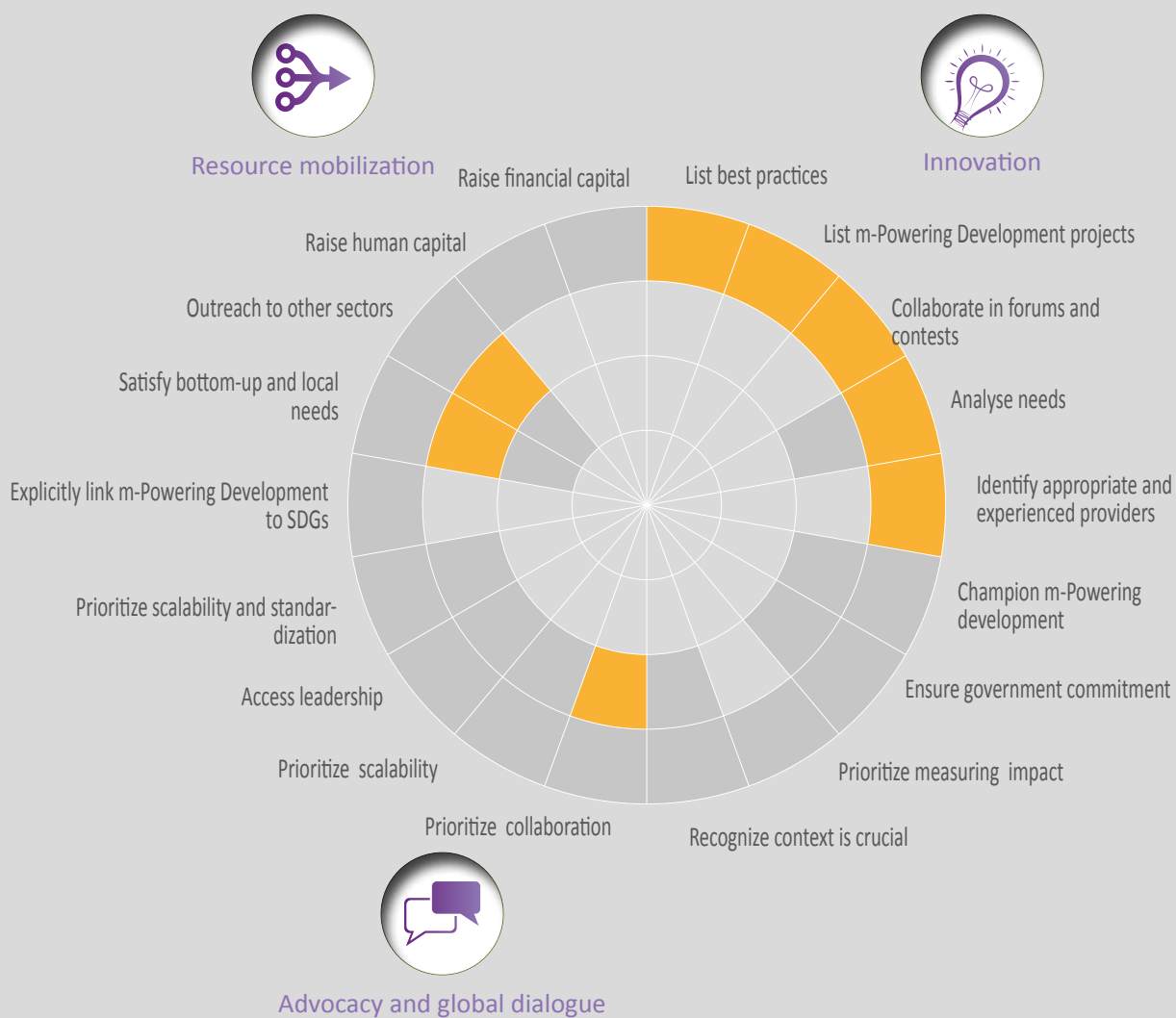


3

INNOVATION



**FIGURE 3
INNOVATION**



ACTION	INITIATIVE
List best practices	<i>Prepare a list of best practices regarding the deployment and use of telecommunication initiatives by international organizations, governments, NGOs, and private companies</i>
List projects in an m-Index	<i>Prepare a list of projects proposed, existing, and implemented, regarding the deployment and use of m-Powering Development Initiative</i>
Collaborate through forums and contests	<i>Partner in events create contest programmes to champion ideas and, globally raise the visibility of the m-Powering Development Initiative global visibility</i>
Analyse needs	<i>Use experience of Actions 1, 2 and 3 to evaluate stakeholder needs</i>
Identify appropriate and experienced providers	<i>Use experience of Actions 1, 2 and 3 to identify actors</i>

3.1 INTRODUCTION

The objective of this report is to highlight the possibilities, requirements and constraints offered by m-Powering technology and in specific terms:

- To identify and promote good practices and innovative solutions for m-Powering Initiatives.
- To identify and promote good practices and innovative solutions for m-Powering Initiatives.
- To support the role of governments within multi-stakeholder partnerships in fostering innovation.
- To convene innovative mechanisms and models for enhancing the use of mobiles for m-Powering Development.

In such a dynamic area, innovation across technologies and business models will serve to ensure the future success of m-Powering Development ideas. This dynamic innovation is further energized by the characteristics of the mobile marketplace and community where successful ideas are often taken up by others in different markets or territories. As a result, there is the potential for rapid refinement in product and services to meet changing needs.

To kickstart this, we must ensure that data on as many m-Powering Development Initiatives is as accessible as possible, to generate a community of interest and prevent needless duplication. We must also ensure that there is sufficient visibility in the wider community of the potential for m-Powering Development and celebrate success when it happens. This success will in turn generate further marketing collateral.

Beyond technology however, we also look to ways in which organizations and individuals themselves can formulate innovative solutions to the challenges involved. There are very strong synergies and common interests with Advocacy and Global Dialogue and with Resource Mobilization.

A related aspect of this is how innovation happens “on the ground.” The Advocacy and Global Dialogue Working Group has discussed concepts of so-called “frugal innovation”, where organizations and individuals work in a context of simplicity and reduced resources. Frugal innovation seeks to do more with less and specifically is relevant to local innovation. Several books have been published on this topic in the way of C.Prahalad’s book, *The Fortune at the Bottom of the Pyramid* in 2004.²¹

In the book by Navi Radjou and his colleagues, *Jugaad Innovation* is described as being based on six operating principles:

- Seek opportunity in adversity.
- Do more with less.
- Think and act flexibly.
- Keep everything about the business simple.
- Tap the margins of society for employees and customers.
- Follow your heart.

Similarly, in his book, Charles Leadbeater identifies 4 core dimensions - Lean, Clean, Simple, Social - that need to be combined for frugal innovators to be successful.

It was considered that m-Powering Development Initiatives in many cases dovetail with frugal innovation concepts, especially given the emergence of important initiatives such as m-Banking, from well outside the traditional mobile innovation community. We need to challenge the assumption that innovation must proceed in a particular way, from a particular source, at a particular time and instead seek innovation wherever it may arise amongst all stakeholders involved.

21 See for example:

The Fortune at the Bottom of the Pyramid, C. K. Prahalad 2004

Our Frugal Future: Lessons from India’s Innovation System, NESTA, 2008.

Jugaad Innovation – Think Frugal, Be Flexible, Generate Breakthrough Growth Navi Radjou, Jaideep Prabhu & Simone Ahuja, 2012.

The Frugal Innovator, Charles Leadbeater, 2014

3.2

ACTION 1

CREATE A DATABASE OF GOOD PRACTICES AND INNOVATIVE MODELS

- *Prepare a list of best practices regarding the deployment and use of m-Powering Development projects across sectors by international organizations, governments, NGOs, and private companies*

Much of the m-Powering Development Initiative is focused on dialogue and globally sharing between stakeholders. It is therefore natural that ITU becomes a central point of contact and repository of an active database. This recommendation should ultimately include all the stakeholder categories listed in Table 1 (item Identified Stakeholder).

OUTLINE SPECIFICATION

In view of the above, a flexible format essentially with free-form structure is proposed. Given the cross-sectoral nature of the Initiative, there is a clear need for subject by subject categorization as well as more generic resources of common interest. There are many existing examples in the m-Powering Development report that detail projects in m-Health and m-Learning as well as best practices as a starting point.²² The ideal content mix could be driven by a simple initial email survey asking stakeholders their preferred topics. Content could include:

- White papers and articles on best practice and lessons learned experiences.
- Resources and links to updates.
- Blog with posting supplied by the global community.
- Audio and video interviews and reports.
- Templates for project management, assessment and evaluation guidelines.

3.3

ACTION 2

CREATE AN M-POWERING INDEX

- *Prepare a list of projects (proposed, existing, and implemented initiatives) regarding the deployment and use of m-Powering*

Many entities, including governments, seek guidance in terms of creating new initiatives, and in particular, do so when investing in IT platforms for appropriate applications in each sector. An m-Powering Index would serve to catalogue all existing mobile applications to enable stakeholders to identify appropriate approaches. Given the costs of establishing new platforms and services, the benefits and savings in cost and time of reviewing established projects cannot be overstated. As the m-Powering Development Initiative Report 2015 envisaged, this recommendation could provide real value to the community.²³ As a visible, accessible outcome, the Index will be one of the major permanent features of advocacy and resource mobilization, in a marketing sense, as well as a user sense.

OUTLINE SPECIFICATION

- The mobile communication and applications space is very dynamic. Projects emerge, develop and may come to the end of their individual life cycles on a near-continuous basis. Consequently, this should be a live index and continuously updated.
- In their simplest form, the databases are accessible lists of projects with an agreed base set of information (Annex 3 presents a sample questionnaire and topic list). In the first phase, this information can be relatively limited and still useful, but as the m-Index develops, as many fields as possible should be involved, and this may involve follow-up surveys.
- This specification and categorization is likely to vary between sectors with specific listings for m-Health and m-Learning, both of which see complex organization and sub-categories.

3.4

ACTION 3

COLLABORATE THROUGH FORUMS AND CONTESTS

- *Partner in events and create contest programmes to champion ideas and raise m-Powering Development Initiative global visibility*

3.4.1 INTERNATIONAL PARTNERSHIPS

As the Advocacy and Global Dialogue Working Group noted, there are many international high-level events that could be utilized to promote the m-Powering Development Initiative advocacy messages.

There are mid-term and long-term opportunities for engaging in other major global events. Additionally, Members of the Working Group are considering other contexts such as the GSR, pre-GSR events, the Clinton Global Initiative, the World Economic Forum and WSIS. Some events may help target other audiences besides government officials, such as the private sector and NGOs.

In the longer term, there is also the possibility of convening a major international summit on m-Powering Development, bringing together high-level international representatives from across the world, and from different relevant sectors. This would require substantial funding, and thus depends on the success of the Resource Mobilization Working Group.

The Working Group also identified the need for a clear strategy regarding the communication that happens at each of the events – and suggested that someone might develop a tool (probably an app) that would help sustain and develop the conversation and on-going sharing after the events.

3.4.2 THE DIGITAL HEALTH PARTNERSHIP (WHO)

Background

Across the diversity of global health programmes, innovative ways to leverage ICT including mobile and wireless communications infrastructure have emerged and been applied in a number of settings. From the most basic application of technology – namely person-to-person voice or text communication – to the more sophisticated systems that provide health workers with decision-support tools, scheduling algorithms

or point-of-care diagnostics, “Digital Health” is seen as an additional tool in the global quest to improve population and individual health, decrease pressure on healthcare systems and lower healthcare costs.

Despite the global proliferation of pilot projects numbering in the hundreds, if not thousands, few Digital Health strategies have yet scaled to national or regional deployment and fewer still have been adopted as part of global standards of healthcare delivery. Over the past few years, there has been active debate and discourse about the barriers and obstacles that may impede the widespread adoption of Digital Health strategies and therefore seamless integration of digital technology in the healthcare sector. There is still a growing need to pursue advocacy to increase awareness among governments of the potential of Digital Health and of the essential need to approach it in a holistic manner. This necessarily entails the involvement of all relevant ministries and partners, notably the health, telecommunications, finance and infrastructure sectors.

There is an urge therefore to stimulate and facilitate high-level dialogue and collaboration between ministries, particularly of health and telecommunications, multilateral donors, NGOs and other relevant stakeholders both globally and nationally in order to build a common understanding and agreement on the role and socio-economic value of ICT as a foundation for Digital Health and to promote regulatory and policy frameworks enabling the development and implementation of safe, effective, trusted and accessible Digital Health solutions.

This proposal is about facilitating this high-level dialogue through a number of interrelated and interdependent events by bringing it to the highest level possible of attention of the health global community including health decision makers, donors, development partners, professionals and end-users.

Objectives

- Continue to raise awareness of the potential of Digital Health and advocate further for its adoption.
- Initiate a high-level dialogue across key stakeholders around key bottlenecks that impede the uptake and upscale of Digital Health.
- Suggest a clear roadmap for countries to accelerate Digital Health uptake.
- Share experiences among countries and learn from leading countries in this field.

Expected outcomes

- Raised awareness about how to position and leverage Digital Health - and particularly affordable technologies such as mobile - strategically within global and national health strategies and action plans as a key tool to facilitate health systems strengthening and as a catalyst to improve health outcomes and empower patients and citizens at large.
- Raised awareness about how the health sector can maximize the benefits of latest technological advancements to achieve Universal Health Coverage using affordable, sustainable and scalable solutions.

- Digital Health increasingly seen as a common agenda item in most, if not all, global health agendas to combat global health challenges.

Annex 5 has further details of the proposed timeline and content for this recommendation.

3.4.3 CONTESTS

The concept of this Action is also to identify activities that best meet the goals of the m-Powering Development Initiative, and develops ideas from the m-Powering Development Initiative Report 2015.²⁴

Actions should be:

- Innovative.
- Affordable, sustainable, and scalable.
- Impactful on society.
- Focus on fostering public-private innovation in delivering education and health mobile services.

This is planned initially in conjunction with specific partner meetings.

Pilot contest implementation: World Health Assembly

The Working Group argues that in terms of m-Health, the availability of financial resources is not necessarily the key barrier for m-Health innovation – rather it is access to government in order to be able to deliver the service. One member quoted the instance of an m-Health app provided by the entrepreneur that enabled patients to register for a doctor’s appointment with an alert provided when the doctor becomes available. The app promotes time saving because there is no need to wait in the doctor’s office until he or she is ready. However, in spite of the benefits offered, rollout of this app is stymied by a lack of willingness of the government to provide doctors with the software for registering patients and sending alerts.

One conclusion for m-Powering Development therefore is to focus on mobilizing partnerships between the entrepreneur and the health Ministries. This is a goal that fits well with the overall multi-stakeholder concept of the m-Powering Development Initiative and also with the Advocacy and Global Dialogue Working Group’s recommendations to promote a multi-stakeholder approach to m-Powering Development Initiatives.

Contest

As a result, discussion focussed on a content that centred on nominees who had mobile solutions that would benefit from partnership with governments. Such partnerships could be fostered during the World Health Assembly (WHA) week or equivalent outreach, ideally when a select group of health and ICT ministers are visiting for meetings. This approach would be particularly attractive where participating organizations such as WHO are prevented from directly participating in such a contest, as it would take place under the auspices of the ITU.

An appropriate timing would be a launch during the WHA and completion for ITU Telecom World with the announcement of winners.

The design of the contest should cover:

- Nomination.
- Criteria.
- Judging.
- Follow-up with winners.

Reuse of template

It is important to deploy resources efficiently; setting up a one-off event programme is likely to be intensive in both design and execution. However, as a practical demonstration of the benefit of partnerships, this could be a worthwhile effort in m-Health, and could also be repeated for m-Learning in partnership with UNESCO. Clearly, an annual programme is also foreseeable on similar timescales. In these cases, a template programme is favored to allow for:

- Reuse of action checklist and timetable for programme organization.
- Reuse of materials for event organization.
- Reuse of marketing resources and collateral (e.g. flyers, webpage design, and email announcements).



- Reuse of contest terms and conditions.

3.4.4 THE MOBILE LEARNING WEEK PARTNERSHIP (UNESCO)

ITU and UNESCO should explore ways through which they could deliver a joint session at the next Mobile Learning Week but initial ideas include:

- The involvement of 5-10 education ministers and 5-10 ICT ministers from a diversity of backgrounds.
- The need for a powerfully appealing theme, purpose and outputs to attract ministerial participation.
- A half-day high level policy session
- The feasibility of leading to signing of commitments

EXHIBITIONS

It is widely recognized that seeing an innovation at work is one of the best ways of encouraging people to adopt it, or at least to engage with the concepts and practices involved. The intention of an exhibition is to bring together a number of practical innovations, and have them demonstrated in a stand area, that could, for example, be part of the main ITU stand at ITU Telecom World (Annex 5 carries a sample event outline).

Elements of the programme would include:

- We would propose 15-20 innovators.
- Each would have a display stand (area to be determined).

Additionally, each innovator would be given a five minute pitch (in blocks of 3 or 4 innovators) at various points in the programme when they would speak about their innovation to the assembled audience.

4

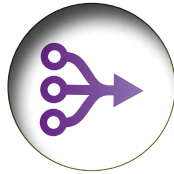
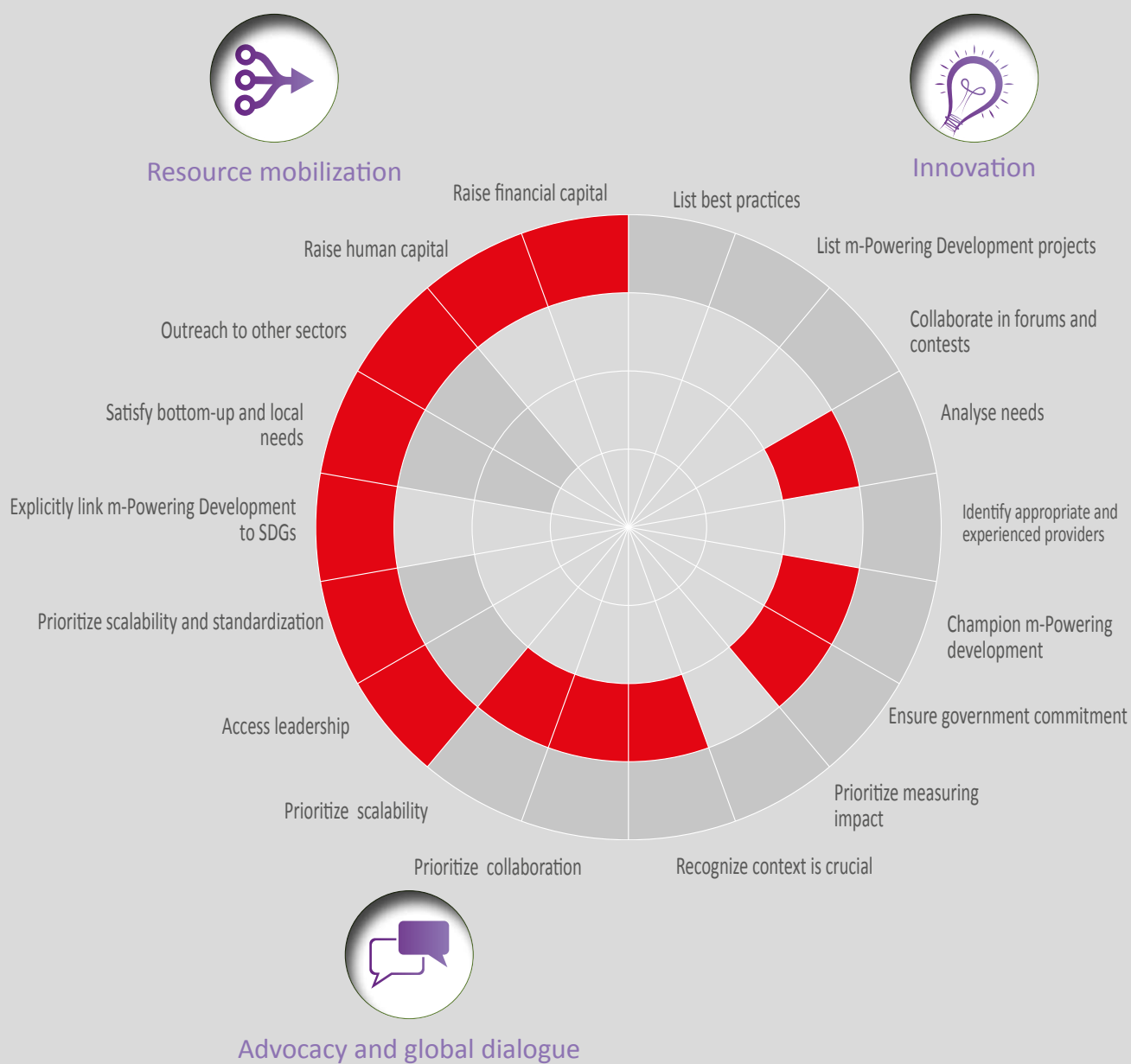
RESOURCE
MOBILIZATION

FIGURE 4
RESOURCE MOBILIZATION ACTION PLAN



ACTION	INITIATIVE
Access leadership	Facilitate the engagement with decision makers
Prioritize scalability and standardization	Focus on platforms
Explicitly link m-Powering Development to SDGs	Articulate the importance ICTs to UN Sustainable Development Goals
Satisfy bottom up empowerment and local needs	Make m-Powering Development a local achievement
Outreach to other sectors	Make m-Powering Development multi-stakeholder
Raise human capital	Make m-Powering Development a team effort
Raise financial capital	Raise start-up funding

4.1 INTRODUCTION

The Working Group on Resource Mobilization is responsible for energizing the development of m-Powering Development and in particular creating a roadmap designed to set up a long term financial and organizational platform and organizational basis. These recommendations are aligned with Actions 1, 2, 4, 5, and 6 of the Advocacy and Global Dialogue Action Plan.

4.2

ACTION 1

ACCESS LEADERSHIP

- *Facilitate the engagement with decision makers*

The Working Group believes that the Initiative needs direct and high level access to world leaders as indicated previously.²⁵ It wishes to target forums where leaders meet and provide a clear message and specifically the m-Powering Development vision developed as a result of the strategies expressed elsewhere in this Report at ministerial and national leadership levels.

4.3

ACTION 2

PRIORITIZE SCALABILITY AND STANDARDIZATION

- *Focus on platforms*

The m-Powering Development Initiative Advisory Board sees scalability as the main operational challenge to m-Powering Development progress. Many otherwise interesting ideas across mobile applications particularly in m-Health and m-Learning are effectively hindered from expressing their true potential implementation because of business or operational models that cannot be scaled up.

The true measure of success therefore would be the emergence of robust long-term and sustainable platforms for any given application. Often, it may be necessary to start with this requirement from the outset.

Two related areas exist where ITU has significant competence to promote such platforms and brings a clear competitive edge to the international community:

- Interoperability
- Standards

ITU is very well known and established as a global standards forum. The Advisory Board sees that m-Powering Development will be accelerated if a rigorous, but impartial standardization effort brings this highly fragmented area together. In particular areas, such as m-Commerce, standardization efforts will further enhance consumer trust and adoption.²⁶

4.4

ACTION 3

EXPLICITLY LINK M-POWERING DEVELOPMENT TO SDGS

- *Articulate the importance ICTs to the UN Sustainable Development Goals*

An integral element of this roadmap is a statement of the importance of ICT to achieving the UN Sustainable Development Goals. Whilst ICT has not been explicitly emphasized in the SDGs, it is clear that it is indispensable to all the transformational processes required to make the SDGs happen. Additionally, specific m-Powering engagements such as m-Health and m-Learning are clearly and directly linked to the goals themselves. Making this link therefore will substantially assist the articulation of m-Powering Development at the most senior level and forums.

4.5

ACTION 4

SATISFY BOTTOM UP EMPOWERMENT AND LOCAL NEEDS

- *Make m-Powering Development a local achievement*

The Working Group believes that mobile communications offers the opportunity to deliver empowerment of a fundamentally different order of magnitude compared to previous generations of technology because it offers a uniquely interactive and personal space to individuals to pursue their needs. Thus, m-Powering is a “within” empowerment of a particularly intimate kind of technological experience.

Strategically, our role collectively is to provide connectivity pipelines, platforms and interfaces. But the content that is mediated should be local. We therefore need to recognize that users will make local adaptation and this adaptation is going to vary from place to place. It is vital to enable people to create local content of relevance to themselves and their communities.

In m-Powering Development, local content creation is emphasized. This represents a major shift from the current situation where content is largely created by developed countries for global consumption by content platforms that invest heavily in marketing to enable worldwide distribution. However local content to date has not seen the same vigor in marketing – largely because the economies of scale have not been favorable - but this will change as we see more and more cost effective forms of digital marketing take place.

There are two more implications of the creation of local content. One is that once created, local content will stimulate more desirable local engagement in communities. The second is that local content will necessarily be under local ownership, adding further cultural and economic opportunities to communities. These concepts have much in common with innovation discussed in 3.1.

4.6 ACTION 5 OUTREACH TO OTHER SECTORS

- *Make m-Powering Development multi-stakeholder*

Inherently, m-Powering Development must be trans-sectoral. In this concept, therefore, a multi-stakeholder approach is necessary to achieve engagement and economies of scale where they are feasible. However, the siloed nature of many areas remains a major challenge which is why leadership engagement at the most senior level is required.

4.7

ACTION 6

RAISE HUMAN CAPITAL

- *Make m-Powering Development a team effort*

This is a team effort. If we do not have the right resource we will not be able to carry m-Powering Development forward. This requires emphasis in both human and financial capital for resource mobilization.

The human factor is extremely important. m-Powering Developments will work if there is a full time commitment of people who are prepared to spread the message about its power to major corporate and NGO entities. With an approach that is inherently trans-sectoral we should see interest from the major corporate entities who see this as a relevant and inclusive space and entirely in their interest to seriously participate. These include telecommunication companies, pharmaceutical companies, and education companies who will all see the desirability of the common connectivity m-Powering Development offers. Other players should also emerge especially if we include those entities that are interested in promoting health and well-being.

4.8

ACTION 7

RAISE FINANCIAL CAPITAL

- *Raise start-up funding*

Finally, we need to ask stakeholders to support financial contributions with which the m-Powering Development pump will be primed. The human capital aspect goes hand in hand with raising financial support to provide for the outreach of the Initiative. When fully funded, the expertise available to the Initiative will be leveraged manifold across the world.

ANNEX 1

WORKING GROUPS

MEMBER OF M-POWERING DEVELOPMENT

NAME	AFFILIATION
Mr Sam Pitroda	Chairman, m-Powering Development Initiative
Advocacy and Global Dialogue Working Group	
Mr Tim Unwin (Chair)	former Secretary General, Commonwealth Telecommunications Organisation
Ms Lindsay Glassco	former Director of International Cooperation and Development, IOC
Mr Sayave Gnoumou	Nazounki Global Medical Network
Mr Gordon Graylish	Intel
Mr Lawrence Yanovitch	GSMA
Seconded to Working Group	
Mr Arran Riddle	GSMA
Mr Olivier Bréchar	Recherche Action pour l'Éducation
Mr David Hollow	Jigsaw Consult

Innovation Working Group

**Ms Kathy Brown (Chair),
represented by Michael Kende**

ISOC

Mr David Atchoarena

UNESCO

Mr Evgeny Bondarenko

Intervale

Mr Housseynou Ba

Former Minister of Health, Mauritania

Ms Florence Gaudry-Perkins

Alcatel-Lucent

Mr Mokhtar Mnakri

Tunisie Telecom

Ms Veena Rawat

Expert Strategies Inc.

Resource Mobilization Working Group

Mr Sam Pitroda

Chairman, m-Powering Development Initiative

ANNEX 2

M-POWERING DEVELOPMENT INITIATIVE: MATERIALS

The Advocacy and Global Dialogue Working Group recommends that the following documents should be prepared, for hardcopy, digital and social media.

HARDCOPY MEDIA

- Pull-up banners that can go to the events and highlight the key messages.
- 6 - sided brochure that builds on the key messages.
- Cards with simple / hard-hitting messaging that can be distributed at events which points recipients to the website.
- Case studies of good practice with applicable lessons.
- Summary of key interesting statistics and figures to assist with communication.
- A Q&A document on the role of mobiles in development [Initial

DIGITAL MEDIA

- The m-Powering Development Initiative website should be developed further to convey the key messages and the summaries of activities (consider pdfs on accessible summaries such as “10 principles for mobiles in development” or “10 pitfalls to avoid in using mobiles in development”).
- A standard slide deck (.ppt) that can be a foundation for contributions to events.
- Data visualization tools (maps, tables etc.) that can be used alongside / instead of usual brochures.

SOCIAL MEDIA

- twitter / FB (@M-POWERING DEVELOPMENT).
- Targeted information to specific audiences.
- Members of the Working Group are currently identifying top sites and top apps to add to the materials available.

ANNEX 3

BASELINE QUESTIONNAIRE FOR M-INDEX DATABASE

ITEM ADMINISTRATION AND REPORTING	ITEM STAKEHOLDER AND FUNDING (continued)
Project title	Project reference data (in stakeholder)
Main project sector: m-Learning, m-Health, m-Commerce, m-Government, Other	Please give details of any national government participation
Brief description	Regulatory approval sought? If so, what kind?
Project objective	Please indicate if you found operational difficulties and delays. What are the lessons to be learned?
Keywords for project indexing	Will the project see a future phase in this or another implementation?
Date initiated	Please give details of any staff training or increase in expertise that this project has enabled
Date completion scheduled	Please give details of any external consultants that worked on the project and their expertise
Project proposed/active/inactive/completed/terminated	Technology
If terminated, please give reasons (e.g. targets met, funding unavailable, etc.)	Platform – network (e.g. 2G, 3G, 4G/Other)
Proposal available/link	Platform – operating system
Report available/link	Terminals used
Other published output/information/link	Software packages used

ITEM ADMINISTRATION AND REPORTING	ITEM STAKEHOLDER AND FUNDING (continued)
Project manager	Developed software
Point of contact/mail/email/phone	Please give details of any open source software used
Service (application) coverage (geography)	What were the main factors that influenced the choice of technology?
Approximate extent of service usage/percentage take-up at highest point	MEDIA, MARKETING AND USER ACQUISITION
Approximate usage of service by user (e.g. messages per individual, time spent by individual etc.)	What is the target group/demographic for the service?
Give details of project assessment and assessment protocol	Please give details of how users to the service were chosen
STAKEHOLDERS AND FUNDING	Do users use their own terminals or are these provided as part of the project?
Main project funder	Do users make any payment for the service?
Project funding (estimated total amount)	Please give brief details of how users to the initiative were recruited
Please give details of other stakeholders	How is follow-up maintained?
Please give details of the financial/non-financial contribution breakdown from project stakeholders	Were users able to evaluate the project (according to a recognized protocol)?
Did any funds arise as a result of universal service or similar agreed industry considerations? If so, please give details.	Please give details of any media coverage the project has received

ANNEX 4

OUTLINE FAQ/Q&A FOR THE M-POWERING DEVELOPMENT INITIATIVE

OVERVIEW QUESTIONS

- What is the m-Powering Development Initiative?
- What do we mean by m-Powering?
- What is a mobile device?
- What are the benefits of m-Powering to society?
- What are the key areas of focus of the m-Powering Development Initiative?

ADVOCACY MESSAGES

- How can mobile technology help countries with their sustainable development?
- How can mobile technology improve health?
- How can mobile technology improve the delivery and quality of education?
- How can mobile technology advance agricultural productivity?
- How can mobile technology contribute to sustainable financial development?
- How does mobile technology affect employment opportunities?
- How does mobile technology enable entrepreneurship, innovation and business development?
- How does mobile technology promote sport?
- What are the top five services that governments are using mobile technology for?

AFFORDABILITY MESSAGES

- How can poor and marginalized people afford mobile technology? [The response should provide statistics on usage and growth of mobile devices in developing countries].
- Isn't mobile technology expensive to use?
- Aren't mobile technology development initiatives expensive and difficult to implement?

ACCESSIBILITY MESSAGES

- What is the digital divide?
- Why is it important to address the digital divide?
- How will mobile technology reduce the digital divide?
- Who will benefit most from mobile technology?
- How do you ensure the sustainability of mobile technology initiatives for development?
- How do you measure impact of mobile technology initiatives for development?

SCALABILITY MESSAGES

- How can rural and remote areas be connected?
- What type of services can be provided through mobile technology to poor and marginalized people?
- Why is it important for government ministries to work together on mobile technology initiatives for development?
- Which ministries should be involved in planning and delivering mobile technology initiatives?
- Which developing countries implement mobile technology initiatives for sustainable development? [The response should include the top 5 with concrete examples of impact].
- What regulatory environments best facilitate mobile innovation?

ANNEX 5

SAMPLE EVENT RESOURCES AND PROGRAMMES

WHO ITU DIGITAL HEALTH SUMMIT

DRAFT TIMELINE

ACTIVITY	DATE
<p>Announcement in January 2016, during the WHO Executive Board meeting, of the WHO-ITU Digital Health Summit.</p> <p>This can be a joint announcement by the WHO DG and ITU SG.</p>	<p>2016 - January</p> <p>WHO Executive Board</p>
<p>Organize a high-level one-and-half days meeting on Digital Health: “Digital Health Summit” – Phase I</p> <p>A high-level ministerial meeting between Ministers of Health and Ministers of ICT (or equivalent in countries), along with key stakeholders to take stock of the status of Digital Health’s impact on health systems and how can it be taken forward. The meeting will be a preparatory step towards preparing the World Health 2017 report on Health Information Systems and Big Data.</p> <p>A joint Ministerial Declaration and/or a Call for Action can be envisaged as an outcome of this meeting to propose short, medium and long term action plans to accelerate the integration of Digital Health in the health sector.</p> <p>At least 10 ministers from each sector (health and ICT) along with key donors, foundations, associations, academia, etc. should be invited to enable meaningful dialogue between the two sectors and across the health community.</p>	<p>2016 - May</p> <p>2 days prior to the 2016 World Health Assembly</p>
<p>World Health Report on Health Information Systems and Big Data</p> <p>The report will be a key milestone in the process of bringing Health Information Systems and Digital Health at the heart of the attention of health decision makers and the broader health community.</p>	<p>2017</p>

ACTIVITY	DATE
<p>Organize National “Digital Health” Days</p> <p>Celebrate the 2017 World Health Day Health Information Systems and Big Data: promote the organization of national level events, between Ministries of Health and ICTs, to trickle the message down at country level.</p>	2017
<p>Organize a second follow up high-level meeting on Digital Health</p> <p>“Digital Health Summit” – Phase II</p> <p>This second summit will take stock on progress made and will follow-up on commitments made by all stakeholders.</p>	<p>2018 or 2019</p> <p>2 days prior to the 2018 World Health Assembly</p>

DRAFT AGENDA FOR ITU WHO DIGITAL HEALTH SUMMIT

ACTIVITY	DATE
<p>High-level Digital Health visioning</p> <p>The session will put into perspective what technological advancements had already and can possibly transform the health sector. Thought leaders and visionaries from governments, academia, NGOs, etc. will present their vision on how ICT can be a game-changer to support health systems transformation and reform.</p>	Day 1: Session 1
<p>Innovations for Global Health Challenges</p> <p>The session will emphasize and showcase existing innovations and evidence-based practices and scientific principles in designing Digital Health interventions.</p> <p>Governments will be called to formulate national guidelines, standards and regulation to guide Digital Health innovation, to prevent the proliferation of non-interoperable, silo-type solutions.</p>	Day 1: Session 2

ACTIVITY	DATE
<p>Governing Digital Health</p> <p>The session will address needed governance and leadership models that can ensure proper adoption and integration of Digital Health for health systems strengthening.</p>	<p>Day 1: Session 3</p>
<p>Collaborating towards upscaling and sustaining Digital Health</p> <p>The session will address the need of multi-stakeholders partnership models that can bring about sustainable change in the adoption of Digital Health. Good and successful cross-sectoral collaborations will be showcased and lessons learned will be shared.</p>	<p>Day 1: Session 4</p>
<p>Funding Digital Health</p> <p>The session will discuss how to ensure sustainable funding of Digital Health initiatives as an integrated component of existing funding streams as opposed to standalone streams.</p>	<p>Day 2: Session 5</p>
<p>Joint Declaration on Digital Health</p> <p>A Declaration and a Call for Action could be released to propose a roadmap for countries to accelerate Digital Health progress and integration within health strategies and plans.</p>	<p>Day 2: Session 6</p>

PLANNED ADVOCACY AND ACTION SESSIONS AT ITU TELECOM WORLD 2015

The m-Powering Development Initiative was represented through three main activities, all of which were scheduled to take place within the BDT Pavilion in the Exhibition Hall of ITU Telecom World 2015. It is feasible that this outline programme of activities could be replicated in various future forums and events:

INTERACTIVE PANEL SESSION

The objectives were:

- To brief participants on the m-Powering Development Initiative.
- To get them to buy in to m-Powering Development activities in the future.
- To gain their insights into how mobiles can contribute to m-Powering Development.

CO-CREATION SESSION

To engage participants in developing new insights about m-Powering Development that could be incorporated into the initiative.

To raise awareness about recent innovations in the use of mobiles for development.

INNOVATORS EXHIBITION

To provide an opportunity for innovators in the use of mobiles for development to showcase their innovations.

ANNEX 6

ADVISORY BOARD MEMBER BIOGRAPHIES

CHAIRMAN OF THE ADVISORY BOARD



Mr Sam Pitroda

- Former Advisor to the Prime Minister of India
- Broadband Commission for Digital Development Member
- C-SAM Inc.

Mr Sam Pitroda is an internationally-respected telecommunication inventor, entrepreneur, development thinker, and policy maker who has spent 49 years in information and communications technology (ICT) and related global and national developments.

Credited with having laid the foundation for India's telecommunication and technology revolution of the 1980s, Mr Pitroda has been a leading campaigner to help bridge the global digital divide. During his tenure as Advisor to Prime Minister Rajiv Gandhi, Mr Pitroda led six technology missions related to telecommunication water, literacy, immunization, dairy production and oil seeds. He was also the founder and first Chairman of India's Telecom Commission. In these plural roles, Mr Pitroda helped revolutionize India's development philosophies and policies with a focus on access to technology as the key to social change.

As a way to induce the second phase of India's technology revolution in 2005 Mr Pitroda headed India's National Knowledge Commission (2005-2009), to provide a blueprint of reform for the knowledge-related institutions and infrastructure for the 21st century in the country.

Recently, Mr Pitroda served as Advisor to the Prime Minister of India on Public Information Infrastructure and Innovation with the rank of a Cabinet Minister. He served as the Chairman of the Smart Grid Task Force, as well as the committees to reform public broadcasting, modernize railways, deliver e-governance, and other developmental activity. He is also a founding Commissioner of the United National Broadband Commission for Digital Development and Chairman of the International Telecommunication Union's m-Powering Development Board that looks to empower developing countries with the use of mobile technology.

In addition Mr Pitroda holds over 15 honorary PhD's, close to 100 worldwide patents, and has published and lectured widely in the United States, Europe, Latin America and Asia.



Mr David Atchoarena

- Director
- Division for Teacher Development and Higher Education
- United Nations Educational, Scientific and Cultural Organization (UNESCO)

David Atchoarena is Director of the Division for Teacher Development and Higher Education at UNESCO. Prior to holding this post, he served as Senior Programme Specialist at the International Institute for Educational Planning (IIEP), UNESCO, Paris where, since 2006, he was heading the Training and Education Programmes Unit of the Institute, including the IIEP Masters Programme in Educational Planning and Management. Before joining the Institute, in 1991, he served as “Chargé de Mission” at the National Agency for Lifelong Education (ADEP) of the French Ministry of Education, and as Project Coordinator in the Ministry of Finance and Planning, in Saint Lucia.

He is also Honorary Professor in the School of Education at the University of Nottingham (UK). He holds a Doctorate in Economics from the University of Paris I (Panthéon-Sorbonne).

His research work covered several areas related to educational planning and policies, technical and vocational education and training, lifelong learning, and education for rural development. He is author of several publications and articles on education, including lifelong learning, technical and vocational education, non-formal and adult education, financing of education, educational planning, education and rural development.

In his present capacity, in addition to issues related to teachers and education policies, his responsibilities include developing and overseeing the UNESCO education programme in higher education and in ICT in education. His current themes of work include quality assurance in higher education, recognition of degrees and academic qualifications, mobility of students, governance of universities, ICT in education policies, ICT for teachers development, mobile learning and the UNITWIN/UNESCO Chairs programme.



Prof. Tim Unwin

Professor Tim Unwin is UNESCO Chair in ICT for Development (ICT4D) and Emeritus Professor of Geography at Royal Holloway, University of London. He was Secretary General of the Commonwealth Telecommunications Organization (CTO) from 2011-2015, and was Chair of the Commonwealth Scholarship Commission from 2009-2014, having been a Commissioner since 2004.

He serves on the ITU's m-Powering Development Advisory Board, the UK Department for International Development's Digital Advisory Panel, the UN University – Computing and Society International Advisory Board, and the World Economic Forum's Internet for All initiative's Steering Committee. He is also Honorary Professor at Lanzhou University in China, and a Distinguished Fellow of the Globalization, Ageing, Innovation and Care Network at Tilburg University in the Netherlands. He has written or edited 15 books and more than 200 academic papers and chapters, many of which focus on the use of technology in development practices.

His book, *Information and Communication Technologies for Development*, was published by Cambridge University Press in 2009, and he is currently writing a new book on ICT4D for Oxford University Press.



Lawrence Yanovitch

Lawrence Yanovitch is the president of the GSMA Foundation which supports programmes to connect the underserved to a better future. The Foundation brings together the mobile industry, adjacent industries and the international development community in order to advance commercial business models in connectivity, health, education, banking, women's empowerment, agricultural productivity, identity, and renewable energy.

Mr. Yanovitch was previously an officer at the Bill & Melinda Gates Foundation where he managed a portfolio of investments in financial services for the unbanked targeted to reach 80 million households. Prior to that, Mr. Yanovitch had a long career in microfinance and philanthropy. He is a former member of the management team at FINCA and of the faculty of Georgetown University in Washington, D.C.



Mr Housseynou Ba

- Former Minister of Health
- Mauritania

Mr Housseynou Ba was Minister of Health in Mauritania from February 2011 to February 2013.

He is currently a Consultant and Professor at Nouakchott University. He has held many senior positions in the public sector including as Minister Delegate to the Prime Minister for the Environment and Sustainable Development, Secretary General of the Ministry Delegate to the Prime Minister in Charge of Administration Modernization and Information Technology and Communication, Director, Office of the Secretary of State for the Modernization of administration and Information technology and Communication, Secretary General of the Department of Employment, Integration and Professional training, National Director of Information Technology and Communication to the Secretary of State to the Prime Minister in Charge of New Technologies, IT Director of the National Company of Telecommunications (MAURITEL), and IT Director of Telecom and Post Office.

He has conducted many professional studies and assignments. These included the study and realization of the first national node of the Internet in Mauritania to the telecommunications operator, the study and realization of the national network of the incumbent IP service, the study and implementation of IP network Intranet broadband optical fibre for Mauritanian Administration, the participation in the establishment of a national network for e-health, and the design of the transmission network for the first network bank electronic payment of Mauritania (GIMTEL).

He has conducted several wide-ranging studies in IP networks, e-health, projects evaluation, information systems, e-government for the African Development Bank, World Bank, International Telecommunication Union, World Health Organization, and Economic African Commission.

Mr Housseynou Ba holds an Engineering degree in Telecommunications from the National Institute of Telecommunications in Rabat, Morocco, awarded in June 1981, as well as a Senior Engineering degree in computer science and electronics of from ENSEA, France in July 1985. He has been Professor from 1986 - 1994, and again since April 2013. He was President of the Mauritanian Internet Society (1998-2001) and holds National Medal of recognition of Mauritania.



Mr Evgeny Bondarenko

- Vice Chairman ITU-D SG 2
- Deputy Director General
- Intervale, Russia

Mr Evgeny Bondarenko is a Deputy Director General of Intervale. His main activities are: International relations and interaction with state authorities and public organizations. At WTDC-10 he was elected as the ITU-D SG2 vice-chairman where he has been active in the field of usage of mobile devices for e-government, financial and medical services as the vice-rapporteur of Q17-3/2. At the WTDC-14 he was re-elected as the SG2 vice-chairman and vice-rapporteur on Question 1/2.

Mr. Evgeny Bondarenko has more than 40 years of experience in telecommunications. After graduating from the Moscow Power Engineering University with a degree in radio engineering, he was engaged in the development of microwave devices for deep space communication at the Institute of the Academy of Sciences of the USSR.

In 1992 he moved to the then just founded private mobile operator - VimpelCom (Beeline), which became later one of leaders in CIS market. After 14 years work for Vimpelcom as a head of technical department, deputy technical director, regional technical director, he moved to Euroset retail company as a vice-chairman on technology development.



Ms Kathryn C. Brown

- President and Chief Executive Officer
- Internet Society

Kathryn C. Brown joined the Internet Society as President and Chief Executive Officer on 1 January, 2014. She is a veteran of Internet policy development and corporate responsibility initiatives that have aided in the Internet's global expansion. Her career spans the public and private sector, including serving in the United States National Telecommunications Information Administration (NTIA) as well as the Federal Communications Commission (FCC) during the Clinton Administration.

Ms Brown has also headed up policy and global corporate social responsibility initiatives for telecom provider Verizon as well working on legal and regulatory communications policy for law firms and consultancies.

She received her J.D., summa cum laude, from Syracuse University College of Law and her B.A., magna cum laude, from Marist College. Ms. Brown has served on the advisory boards of the Public Interest Registry (.ORG), the m-Powering Development Advisory Board of the ITU, and the USC Annenberg Innovation Lab.



Mr Robert Collymore

- Chief Executive Officer
- Safaricom Limited

Mr Robert Collymore is the current CEO of Safaricom Limited, effective 1 November 2010.

Prior to joining Safaricom, Mr Collymore was the Chief Officer for Corporate Affairs in Vodacom Group responsible for the Group's Corporate Communication, Ethics and Compliance, Legal, External Relationships and Corporate Social Responsibility. Prior to that, he was Vodafone's Governance Director for Africa where he was responsible for developing and driving Vodafone's strategy for its investments in Africa as well as representing Vodafone as a key direct foreign investor in a number of African countries.

Mr Collymore has more than 25 years of commercial experience working in the telecommunications sector. He is also a trustee of Holding companies in Kenya and Tanzania for M-PESA, Vodafone's pioneering money transfer service.



Ms Lindsay Glassco

- Former Director of International Cooperation and Development
- International Olympic Committee

Lindsay Glassco was the Director of International Cooperation and Development at the International Olympic Committee where she was responsible for bringing to life the fundamental principle of placing sport at the service of humankind.

Prior to joining the IOC in January 2014 Ms Glassco was President and CEO of Special Olympics Canada (SOC) where she oversaw all operations of the Canadian division of the international organization, which provides people with intellectual disabilities the opportunity to participate in sport competition and daily programs.

Ms Glassco has more than 20 years of experience in developing and implementing policies and programs in the non-profit and government sectors globally. Prior to joining SOC, Ms Glassco was responsible for strategic and operational planning for Right to Play (RTP). While at RTP, Ms Glassco also oversaw relationships with governments and UN agencies worldwide and shepherded the highly successful four-year policy initiative, the Sport for Development and Peace (SDP) International Working Group.

Before her tenure at RTP, Ms Glassco spent close to a decade with the Canadian federal government, including Foreign Affairs Canada, developing policies and programs in the areas of disability, global health, and Canada's labour market. Prior to her career in Canada, Ms Glassco based in Geneva and Rome, was an international social development consultant to UN organizations such as FAO, UNV and UNDP.

Ms Glassco first worked in the sports sector as an account manager with the world-leading sports marketing agency International Management Group.

Throughout her career, Ms Glassco has worked tirelessly towards one overarching goal: the inclusion and social development of the world's most marginalized people. As the Director of International Cooperation and Development at the IOC, she continues on this path of building a better world through sport.

Ms Glassco holds a master's degree (MPhil) in International Development from the Institute of Development Studies at the University of Sussex (England), as well as a Bachelor of Arts degree from McGill University.



Dr Sayave Gnomou

- Chief Executive Officer and President
- Nazounki Global Medical Network

Dr Sayave Gnomou is the founder of Nazounki Global Medical Network, a company that takes a 360° all-inclusive approach in its care of patients seeking treatment abroad. Nazounki uses technology to share with specialists all over the world, medical information of its “patients of the world”.

Dr Gnomou became a leader in the telemedicine field and has been a pioneer in developing ICT tools to provide the best medical care, and in particular to patients in the most remote places going abroad for treatment. As a result, he has become a reference for various organizations (e.g. AU and UNGAID) in the use of ICT in health.

Dr Gnomou has been practicing medicine for over 20 years and specializes in general surgery, micro surgery, and urology.



H.E. Dr Omobola Johnson

- Minister
- Federal Ministry of Communication Technology
- Nigeria

Dr (Mrs) Omobola Johnson is Nigeria's Honorable Minister of Communication Technology. Prior to her ministerial appointment, she was Country Managing Director of Accenture, Nigeria (2005) and was responsible for implementing Accenture's strategy in Nigeria and the rest of West Africa. She superintended over a staff strength of 120 covering five industries – Financial Services, Resources, Products, Communications and Public Sector and a wide range of consulting services (strategy, information technology and finance and performance management). She has over 25 years consulting experience which includes significant experience in the area of enterprise transformation and has worked with Boards and Management of several major banks and the Central Bank of Nigeria to successfully transform these organizations into more competitive and dynamic ones.

She is the Chairperson of the United Nations' Commission on Science and Technology for Development (CSTD). She is a member of the World Economic Forum's **Global Agenda Council on Africa with the** role of actively guiding the Council to deliver insights and develop solutions to address major global challenges especially those relevant to Africa. She is also a member of UNDP's Broadband Commission Working Group on Gender whose main objective is to promote the empowerment and digital inclusion of women.

Dr Johnson is also the founding Chairperson and Member of Board of Trustees of Women in Management and Business (WIMBIZ) a non-governmental organization that seeks to improve the success rate of female entrepreneurs and increase the proportion of women in senior positions in corporate organizations.

Dr Johnson holds a Bachelor's Degree in Electrical and Electronic Engineering from the University of Manchester, a Master's degree in Digital Electronics from King's College, London, and a Doctor of Business Administration degree from the Cranfield University School of Management.



Mr Navin Kapila

- Independent Consultant
- Managing Director of India
- Inmarsat Plc.

Mr Navin Kapila has been Managing Director of India at Inmarsat Plc since 21 January, 2013. He was a senior official within the Indian Government's Ministry of Communications and Information Technology and also served as Vice President of Corporate Development at ICO Global Communications (London), and served as its Vice President of Government Affairs and Director of Business Development. He currently serves as a non-executive Board Member of Telkom South Africa and an International Telecommunication Union Special Adviser for Emergency Communications.

Mr Kapila is a seasoned professional who has, for more the past 25 years, gained vast experience in diverse fields including investment, business and product development and relationship and alliance management. He has in-depth telecommunications experience and was involved in policy formulation and market deregulation. Mr Kapila was educated at India's Punjab University. In October 2012, Mr Kapila was presented with the only individual award by ITU Secretary-General Hamadoun Touré at the ITU's first Humanitarian Awards ceremony.



Dr Rahul Khullar

- Chairman
- Telecom Regulatory Authority
- India

Dr Rahul Khullar joined Telecom Regulatory Authority of India as Chairman on 14 May 2012. Prior to joining TRAI, he was Commerce Secretary in Ministry of Commerce and Industry, Government of India. He also served as Secretary, Department of Disinvestment, Ministry of Finance, Government of India.

He is a permanent civil servant who joined the Indian Administrative Service in 1975. He has served in various capacities and at various levels in the Central and State Government. He has served as Director in the Prime Minister's Office, Private Secretary to Union Finance Minister, Development Commissioner for Delhi, Commissioner of Sales Tax, Delhi and Principal Secretary (Planning), Delhi. He has also served as Additional Secretary and Special Secretary in the Department of Commerce, Ministry of Commerce & Industry. He has been Chief Negotiator for India in the Doha Round of multilateral trade negotiations at the WTO. He was also Chief Negotiator for the Free Trade Agreement (FTA) with the EU.

Dr Khullar has worked as a professional economist in the Asian Development Bank (ADB), Manila from 1994 to 2000. In this assignment he worked as a Lead Economist for the Pacific, and later for the Philippines, and, thereafter, for Central Asia (Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan, etc.). He also served as Senior Economist in the Strategy and Policy Office attached to the President of the Asian Development Bank.

He has a Ph.D. in Economics and has been a Visiting Professor in the Department of Economics, Boston University (1990-91), and a Lecturer at the Kennedy School of Government, Harvard University, Cambridge USA (1982-84).



Dr. Marie-Paule Kieny

- Assistant Director-General
- World Health Organization (WHO)

Dr Marie-Paule Kieny was appointed WHO Assistant Director-General for Health Systems and Innovation in November 2012. Dr. Kieny was WHO Assistant Director-General for Innovation, Information, Evidence and Research from October 2010-November 2012.

Prior to this, Dr Kieny directed the WHO Initiative for Vaccine Research since its inception in 2001. Major successes under her leadership were the development and licensing of new vaccines against meningitis and against pandemic influenza in developing countries through pioneering the transfer of technology and know-how. Vaccines against poverty-related diseases and those that disproportionately affect poor and marginalized populations are continuing priorities since her first role in WHO with the Special Programme for Research and Training in Tropical Diseases in 2001.

Before coming to WHO, Dr Kieny held top research positions in the public and private sectors of her home country, France. The positions included Assistant Scientific Director of Transgene S.A. from 1981 to 1988, and Director of Research and Head of the Hepatitis C Virus Molecular Virology Group at the Institute of Virology, Institut national de la santé et de la recherche médicale (INSERM) from 1999 to 2000.

She received her PhD in Microbiology from the University of Montpellier in 1980, where she was also awarded a University Diploma in Economics, and her Diplôme d'Habilitation à Diriger des Recherches from the University of Strasbourg in 1995. Dr Kieny has published over 250 articles and reviews, mainly in the areas of infectious diseases, immunology and vaccinology.

Dr Kieny was awarded the coveted Chevalier de l'Ordre National du Mérite, au titre du Ministère de la Recherche (2000); the Prix Génération 2000-Impact Médecin (1994); and the Prix de l'Innovation Rhône-Poulenc (1991).



Mr Siphon Maseko

- Group Chief Executive Officer
- Telekom SA SOC Ltd.

Mr Siphon Maseko was appointed as Group Chief Executive Officer and as an Executive Director of Telkom on 1 April 2013.

He was the Group Chief Operating Officer and Managing Director at Vodacom since 2011. Prior to joining Vodacom, Mr Maseko was the Chief Executive Officer of BP Africa (Pty) Limited from 2008 to 2012 and the Chief Operating Officer in 2007. He also served in various positions at BP since 1997.

Mr Maseko has been a Non-Executive Director of the Board of the Centre for Development and Enterprise since 2009 and of the Afrox Board since 2012. He served as Chairman of the Board of SAPREF (Shell & BP South African Petroleum Refineries Pty Ltd) from July 2010 to August 2011.



Mr Mokhtar Mnakri

- Advisor on ICT Management & Governance
- Former Chairman and CEO of Tunisie Telecom Group

Mr Mokhtar Mnakri has more than 25 years track in the business of telecommunications. Since 2012 he has been CEO and Chairman of Tunisie Telecom Group, the incumbent operator in Tunisia.

He previously worked for large manufacturing companies Alcatel, then ALU for 20 years and was, in the early stage of mobile network deployments, in charge of Sales Support and Business Development in Africa & Middle East.

In the early 2000's he led for Alcatel commercial activity for mobile in North Africa, Middle East and South Asia. In 2008, he was appointed Country Senior Officer and CEO of ALU Tunisia until end 2010. He then ensured support to European and MEA companies in Business Development & Management during 2011 until his appointment in Tunisie Telecom in 2012.

Mr Mnakri has a comprehensive view on the telecommunications sector and its actors. He has also developed intercultural management skills, along with a solid track in management of people and organizations. Mr Mnakri holds a Masters degree in Telecommunications from the Ecole Nationale Supérieure des Telecoms, Paris, and a MSc in Civil Aviation and Aerospace from the Ecole Nationale de l'Aviation Civile, Toulouse, France. He speaks Arabic, English and French.



Dr Veena Rawat

- Communications Technologies Consultant

Dr Veena Rawat is an internationally-acclaimed expert in radio frequency spectrum planning and management. She is currently working as a Communications Technologies Consultant, providing advisory services to a number of organizations and corporations nationally and internationally. In 2014 she became an Officer of the Order of Canada for her “contributions to telecommunications engineering and for leadership in establishing the global regulatory framework for radio spectrum management”

Between 2011 and 2014, prior to taking up consulting, Dr Rawat worked as Vice President and Ambassador to ITU for BlackBerry. This role included representation of BlackBerry’s interests in ITU at executive level for issues dealing with spectrum for mobile broadband, network and mobile device security, and e-waste environmental issues among others.

During 2004-11, Dr Rawat was President of Communications Research Centre, the only Canadian federal government research laboratory conducting R&D in all communications technologies. As President of CRC, Dr. Rawat was member of a number of advisory boards dealing with innovation in ICT.

Before heading CRC, Dr Rawat spent 28 years within the Canadian Government where she held executive positions managing programs related to radio frequency spectrum engineering for all wireless and space communication services. This included: leading negotiations at the International Telecommunication Union (ITU), Organization of American States (OAS) and US Government (FCC, NTIA); chairing major national and international committees; and consultations with senior executives of the telecommunications and space industry at global level to develop policies and regulations. She has served on the board of numerous national and international professional organizations.

She has received numerous International and national awards for her contribution to the Canadian and international telecommunications industry. Her most recent award in 2014 is: from the Governor General of Canada, Officer of the Order of Canada, one of the highest award of the country. Other key awards, among over thirty prestigious awards, are: from IEEE for Public Service in Communications (2012); from the Government of Canada the highest Public Service Award of Excellence (2011); from ITU, a gold medal (2003) and a silver medal before that; Canadian Women in Communications’ Canadian Woman of the Year (2004); and Canadian Women’s Executive Network’s Canada’s Most Powerful Women, Top 100 (2005);



Mr Mohamed Sharil Mohamed Tarmizi

- Chairman
- Malaysian Communications and Multimedia Commission

Dato' Mohamed Sharil Mohamed Tarmizi was appointed as Chairman of the Malaysian Communications and Multimedia Commission (MCMC) effective 16 October 2011. He served as a Member of the Commission from 2006 for two terms during which time he was subsequently invited to join the MCMC as Chief Operating Officer in 2008 prior to his current appointment.

He was the Executive Director and Head of Strategy in BinaFikir Sdn Bhd, a financial advisory and strategy consulting firm, prior to joining SKMM as the Chief Operating Officer.

In the international arena, Dato' Mohamed Sharil is recognized as an authority in the area of Internet Governance where he was appointed as Chairman of the Government Advisory Committee (GAC) from 2003 to 2007, as well as a Board Member in the Internet Corporation of Assigned Names and Numbers (ICANN) during the same period. At the end of his tenure, he was honoured by the GAC, the ICANN Board and the global internet community for successfully navigating the GAC and assisting ICANN through the challenging early years of the debates surrounding Internet Governance at two WSIS events in Geneva (2003) and Tunis (2005).

He has also worked with the World Trade Organization (WTO) in the areas of capacity building and helping countries undergo regulatory reform in preparation for globalization. In particular, he was involved in the further development of the Telecoms Reference Paper for the Telecommunications Sector as well as the drafting of the Postal Services Reference Paper for the Postal and Express Delivery Sector. He was also one of Malaysia's lead negotiators for the telecommunications sector in various rounds of WTO negotiations as well as the various trade or economic cooperation agreements that Malaysia has had.

He was also recently elected the Vice Chairman of the ITU Council's Child Online Protection initiative, an initiative to address the ills of cyberspace particularly against young persons and children. He also sits on the Board of Trustees of the International Multilateral Partnership Against Cyber Threats (IMPACT) and he was appointed to the Board of Directors of the Multimedia Development Corporation by Prime Minister Dato' Sri Mohd Najib Tun Razak.

He holds a Bachelor's Degree in Law from University College of Wales, Aberystwyth and qualified as a Barrister from Gray's Inn, England and Wales (UK).



Mr Binali Yıldırım

- Minister of Transport, Maritime Affairs and Communications
- Republic of Turkey.

Mr Yıldırım left his position as Minister of Transport Maritime Affairs and Communications in December 2013. Mr Yıldırım, besides his parliamentary engagements, works as the Senior Advisor to the President of the Republic of Turkey, H.E. Mr. Recep Tayyip Erdoğan.

Mr Binali Yıldırım was elected as Member of Parliament from the province of Istanbul in the general elections held on 3rd November 2002 and was appointed as the Minister of Transport and Communications in the 59th Government of the Republic of Turkey.

He was re-elected as a Member of Parliament in the general elections held in 2007 and in June 2011 and after both elections he continued his post as the Minister of Transport Maritime Affairs and Communications of the Government of Turkish Republic. During his term in office, his vision on Information Society led to development of policies and projects which have been implemented in the field of ICT in addition to many important transport infrastructure projects.

He studied Maritime Safety Administration between 1990 and 1991 at the World Maritime University (WMU) – Malmoe/Sweden under the auspices of the International Maritime Organization (IMO) where he was granted MSc. degree on Maritime Safety Administration. He worked at various managerial levels of General Directorate of Turkish Shipbuilding Industry and Camialtı Shipyard until 1994. He was appointed as the General Manager of Istanbul Sea Buses Corporation (IDO), a position he held until 2000.

Mr Yıldırım headed Turkish delegations in numerous bilateral meetings in the field of transport and communications. Moreover, during his office, many intergovernmental or transport and communications related meetings of various international organizations have been held under his Chairmanship. He is presently member of the Board of Governors in the World Maritime University- Malmoe since 2007. He also served the university being a member of the Executive Board of the University until 2014.

Mr Binali Yıldırım graduated from the Technical University of Istanbul with a Bsc. Degree in Faculty of Naval Architecture and Marine Engineering in 1977. He has been awarded honorary doctorates by 14 different universities in Turkey and Europe including Technical University of Berlin (Germany), World Maritime University (Sweden), Technical University of Istanbul, Bozok University-Yozgat, Ondokuzmayıs University-Samsun and an honorary science doctorate from Cumhuriyet University-Sivas.

He is member of various Non-Governmental Organizations as well as the Head of Piri Reis Maritime Foundation and Culture and Co-operation Association of Refahiye.



Mr. Gordon G. Graylishm

Gordon Graylish is a vice president in the Sales and Marketing Group and general manager of the Governments and World Ahead Division at Intel Corporation. The mission of Governments and World Ahead is to work with governments and international agencies to accelerate the adoption of information technology best practices and encourage the successful innovative use of technology.

Prior to his current assignment, Graylish worked as vice president and general manager of Enterprise Solutions for Intel, responsible for the company's engagements with the largest users of Intel technology driving the most effective use of that technology across the full range of enterprises. Throughout his Intel career, Graylish has held the role of co-general manager of Intel in Europe, Middle East and Africa, responsible for Intel's business in that geography.

Graylish has held a variety of senior roles in sales and marketing across the entire portfolio of Intel's products and solutions in the computing and communications space. He joined Intel in Canada in 1982 as a member of the Software and Sales division, where he held a number of sales and management positions. Additionally, he speaks frequently on the disruptive impact of technology on societies and how it can positively impact growth and development.

International Telecommunication Union
Telecommunication Development Bureau
Place des Nations
CH-1211 Geneva 20
Switzerland
www.itu.int

ISBN: 978-92-61-16501-7



Printed in Switzerland
Geneva, 2016

Photo credits: Shutterstock