Mobile for Development Utilities

Innovation Fund 2017:
Our new grantees

GSMA Mobile for Development Utilities

The GSMA represents the interests of mobile operators worldwide, uniting nearly 800 operators with more than 300 companies in the broader mobile ecosystem, including handset and device makers, software companies, equipment providers and internet companies, as well as organisations in adjacent industry sectors. The GSMA also produces industry-leading events such as Mobile World Congress, Mobile World Congress Shanghai, Mobile World Congress Americas and the Mobile 360 Series of conferences.

For more information, please visit the GSMA corporate website at www.gsma.com
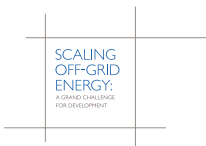
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The Mobile for Development Utilities programme improves access to basic energy, water and sanitation services in underserved communities using mobile technology and infrastructure. Our work encompasses any energy, water and sanitation service provided to a community, which includes a mobile component, whether it is voice, SMS, USSD, Machine-to-Machine, NFC, a mobile operator's agent network or tower infrastructure. We aim to seize the opportunity, leveraging mobile technology and infrastructure to enhance access to affordable and reliable energy, clean and safe water and sanitation services in underserved communities. The GSMA Mobile for Development Utilities programme receives support from the UK Government and Scaling Off-Grid Energy.

For more information, please contact us:
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Introduction

In 2017, there are 1.1 billion people without basic energy access, 848 million without access to improved water services and 2.5 billion with no access to sanitation.

The challenges to providing universal access to utility services include last mile distribution, operation, maintenance, and payment collection. Furthermore, as urban growth stretches the limits of existing and antiquated infrastructure, millions more people across emerging markets are living with an increasingly intermittent and unpredictable supply of basic utility services.

While energy, water and sanitation access experiences slow growth rates, the growth of GSM mobile networks in emerging markets has stunned observers. The scale and the reach of the mobile industry's infrastructure, distribution channels, mobile payments and technologies therefore offer new pathways to achieve improved access to utility services for underserved communities.

The GSMA's Mobile for Development Utilities programme (formerly MECS) was launched in 2013, with the support of the UK Government, and newly Scaling Off-Grid Energy, to explore the role that mobile technology and infrastructure can play in improving access to basic energy, water and sanitation services in underserved communities from urban to rural settings.

There are a number of ways in which mobile operators can leverage their assets to create new business models in the utilities space, using mobile technology to support the solutions of innovative service providers. The M4D Utilities programme categorises into the following six mobile channels:

Mobile Channels

How is mobile advancing SDG 6 and SDG 7?

Mobile payments

Mobile money	SMS payments	Mobile credit	→	Remote and secure payment collection	Digital record of payments

Machine-to-machine (M2M) connectivity

Smart metering and monitoring of utility systems via GSM networks → On/off control of services to customers on PAYG arrangement — Improve lifetime and efficiency, trigger maintenance and provide insights into customer behaviour

Mobile services

Voice	SMS	USSD	Apps	→	Report service delivery status	Optimise supply chains	Provide customer support

Infrastructure

Telecom towers used as anchor loads for micro-grid and/or energy hub providing energy to surrounding communities.

Sales, distribution and branding

Leverage MNOs' extensive sales and distribution networks

Benefit from the MNO's recognisable and trusted brand

Customer data

Creditworthiness assessments

Perpetual payments

Rent-to-own models

What is the Mobile for Development (M4D) Utilities Innovation Fund?

The M4D Utilities Innovation Fund, supported by the UK Government and the Scaling Off-Grid Energy, aims to identify and support innovative mobile-enabled solutions that will improve the lives of many by providing access to affordable utility services.

The Innovation Fund was launched in June 2013. Between Phase 1 (2013-2015) and Phase 2 (2015-2017) of the Fund, grants were competitively awarded to 34 organisations across four continents, amounting to 6 million GBP. To date, M4D Utilities estimates these trials have impacted over 4.5 million beneficiaries in underserved populations around the world. These grants have contributed to an additional $275 million raised by grantees from the private sector, showcasing the proof of concept for mobile-enabled utility services.

The specific objective of the Innovation Fund is to extract insights from the trial and scaling of these innovative models to inform three key questions for growing the sector:

• How can mobile support utility services?

• For a mobile-enabled solution to be adopted at scale, what building blocks are needed?

• What are the social and commercial impacts of delivering community services to underserved mobile subscribers?

Our findings have revealed that this is an exciting time as now, more than ever, the proof of concept for using mobile to provide life-enhancing services to the underserved is being realised. The findings from our first 34 grants can be found on our Innovation Fund page.

Geographical spread of M4D Utilities grantees and their MNO partners

WATER   ENERGY   SANITATION

Phase 3 of the Innovation Fund

In February and July 2017, we re-opened calls for applications to the Mobile for Development Utilities Innovation Fund.

This phase was our most competitive to date, with 488 applicants across the two rounds, a 124 per cent increase in applications since our last round of funding in 2015. Our fund was more than 25 times oversubscribed with applicants requesting a total of £77 Million. This booklet showcases 8 organisations recently selected for our innovation fund. In February 2018, the remaining funds will be allocated to a further group of grantees.
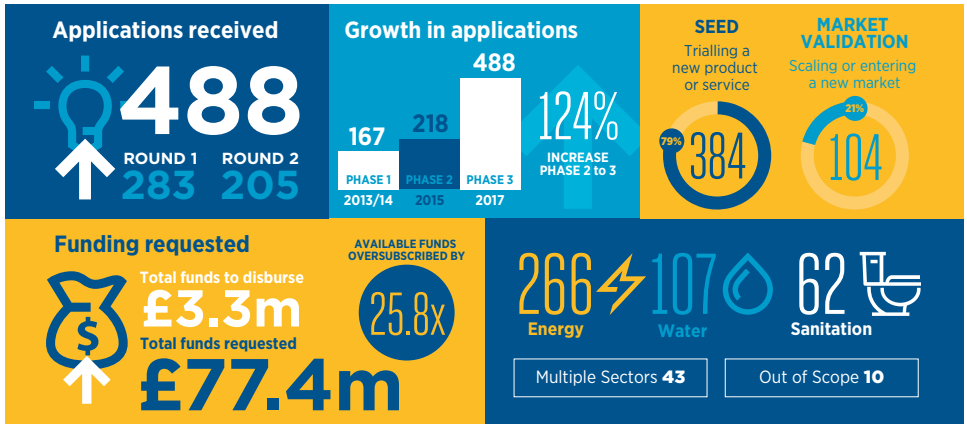
The Innovation Fund awarded two distinct types of grants:

Seed Grants - The specific objective of the Seed Grant is to support the trial of products/services that use mobile to enable sustainable access to energy, water or sanitation.

Market Validation Grants - The specific objective of the Market Validation Grant is to support partnerships with mobile network operators OR utility service providers to support scaling or replication of an existing service that increases or improves access to sustainable energy, water and sanitation services to underserved customers. The service will already have demonstrated early success and have active users in at least one market.

Our new portfolio reflects some exciting new trends in mobile-enabled utility services. For the first time we've awarded several grants to mobile operators leading on energy and WASH services. In the energy sector, we are supporting the bundling of additional appliances with PAYG solar systems, helping customers gain access to smartphones and cookstoves. Water and sanitation applications were particularly competitive in this selection round. The selected grantees in these sectors will deliver innovative models that leverage mobile money, digital platforms to improve the efficiency of service delivery, bill-payment and maintenance.

Findings from our third phase of applications

Applications received

488

ROUND 1 **283** ROUND 2 **205**

Growth in applications

488

167 — PHASE 1 2013/14
218 — PHASE 2 2015
PHASE 3 2017

124% INCREASE PHASE 2 to 3

SEED
Trialling a new product or service

79% **384**

MARKET VALIDATION
Scaling or entering a new market

21% **104**

Funding requested

Total funds to disburse
£3.3m

Total funds requested
£77.4m

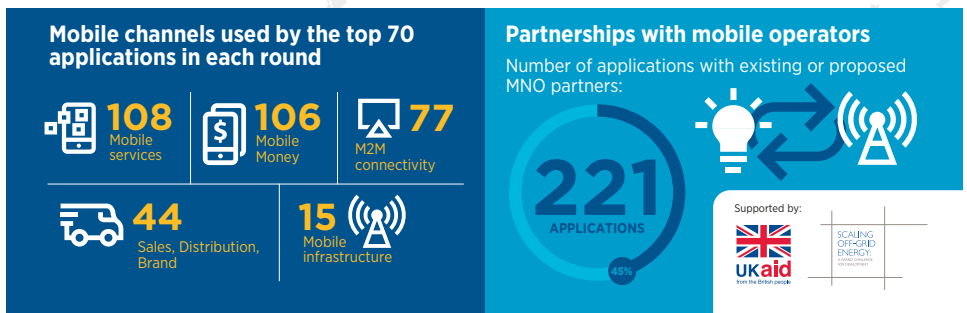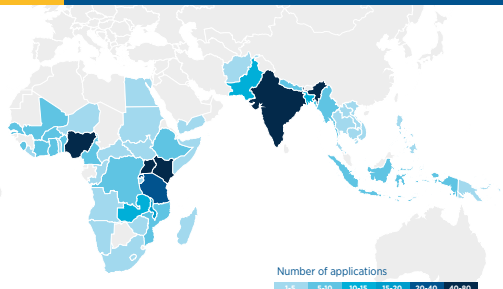**AVAILABLE FUNDS OVERSUBSCRIBED BY**
25.8x

266 Energy
107 Water
62 Sanitation

Multiple Sectors **43**   Out of Scope **10**

APPLICATIONS RECEIVED FROM

53 countries

TOP 3 MARKETS PER ROUND

ROUND 1 Kenya **37** / Uganda **32** / India **29**

ROUND 2 Nigeria **26** / Kenya **22** / Uganda **15**

AFRICA **75%**   ASIA **25%**

Number of applications
1-5 5-10 10-15 15-20 20-40 40-80

Mobile channels used by the top 70 applications in each round

108 Mobile services

106 Mobile Money

77 M2M connectivity

44 Sales, Distribution, Brand

15 Mobile infrastructure

Partnerships with mobile operators

Number of applications with existing or proposed MNO partners:

221 APPLICATIONS

45%

Supported by:

UKaid from the British people

SCALING OFF-GRID ENERGY: A GRAND CHALLENGE FOR DEVELOPMENT

A further set of grantees from Phase 3 applications will be announced mid-2018.

Energy

Name of the organisation	# Vitalite
Name of project	Developing Smartphone and Cook stove add-ons for PAYG solar home systems in Zambia
Project location	Zambia
Partners	Fosera, EcoZoom, Airtel Zambia, MTN Zambia
Type of grant	Seed
Description	Vitalite will offer smartphones and cookstoves for Vitalite solar home system customers in Zambia. The smartphones will be sold on a pay-as-you-go basis, improving affordability of smartphone devices, while the improved cook stoves will provide clean and affordable energy.
Testimonial	"*VITALITE, in partnership with GSMA Mobile for Development Utilities Innovation Fund, will be pioneering Zambia's first PAY AS YOU GO smart phone as an add-on product to our PAYGO solar offering. This is an important step in advancing connectivity to the internet in rural Zambia, and positive step in developing my country.*" William Makubalo, Project Lead

Energy

Name of the organisation	**Orange Madagascar**
Name of project	Orange Energy - Solar Home Systems for rural electrification
Project location	Madagascar
Partners	d.light
Type of grant	Seed
Description	In this project, Orange Money Madagascar will launch a Solar Home System service on a pay-as-you-go basis - using mobile money and leveraging the Orange brand - in partnership with d.light, a supplier of solar home system products. The energy offering will result in improved access to electricity for underserved households around Antananarivo, the northern and western areas of Madagascar.
Testimonial	*"Madagascar is one of the countries facing the biggest challenges in terms of access to electricity. It is estimated that 16% of the population lives in areas where they can access electricity where this figures stands at 61% in Senegal and 86% in South Africa. Orange believes that it is possible to come up with innovative solutions to empower each family in Madagascar, by leveraging Orange's expertise in this field and Orange Madagascar's key assets. Orange will use its wide agent network to reach millions of Malagasy and equip them with solutions such as solar home systems or mini-grid solutions. Beyond distribution it is key to imagine new ways to pay and finance these solutions. This is where our leading mobile financial service Orange Money, and its partners, will help reduce the upfront acquisition cost for as many customers as possible"*. **Michel Degland, CEO, Orange Madagascar**

Energy

Name of the organisation	**Orange Burkina Faso**
Name of project	Orange software-as-a-service smart metering solution in Burkina Faso
Project location	Burkina Faso
Partners	SINCO
Type of grant	Seed
Description	Orange is piloting pre-paid smart metering on mini-grids in partnership with SINCO, a cooperative that manages electricity distribution through rural grids. This smart metering, software-as-a-service solution will enable SINCO's customers to manage their energy expenditure. This prevents households from being regularly disconnected after single-instalment, post-paid bills exceed their ability to pay. The smart-meter solution will leverage mobile money, machine-to-machine connectivity, SMS and other mobile technologies.
Testimonial	*"Mobile along with energy supply can significantly change lives of people in our country and we're strongly committed to make this happen for as much as possible. With this grant from the GSMA Mobile for Development Utilities Innovation Fund, Orange Burkina Faso will be able to deploy a smart metering solution in rural area where only 3% have access to electricity, with sometime flexible and low cost billing & collection solution is a barrier for energy service provider. The power of smart-metering along with our strong mobile money ecosystem, accessible everywhere in the country, is a unique winning combination that will certainly erase energy supply entry barrier in remote areas."* **Ben Cheick HAIDARA – CEO Orange Burkina Faso**

Water

Name of the organisation	# City Taps
Name of project	Phase 2 of the SEEN-CityTaps CTSuite Mobile Money Water Prepayment Service
Project location	Niger
Partners	Orange Niger, SEEN, CIPMEN
Type of grant	Seed
Description	Citytaps will develop CTSuite service, a water utility subscriber management and pay as you go (PAYGO) smart meter solution. This technology will provide new and improved prepaid on-premises water services to the homes of urban residents of Niamey, that currently do not have access to clean, safe, reliable, and affordable water.
Testimonial	*"GSMA's grant will help CityTaps expand its service and impact 10,500 more people without running water at home"* **Grégoire Landel CEO and Founder CityTaps**

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CITY TAPS

Water

Name of the organisation	**Drinkwell**
Name of project	Providing Safe Drinking Water to Low Income Households across Dhaka via Mobile-Enabled Water ATMs
Project location	Bangladesh
Partners	Dhaka WASA, Robi Axiata
Type of grant	Market Validation
Description	Drinkwell will use their GSMA grant to scale the use of their Water ATM-enabled system to provide improved water services to residents of Dhaka, Bangladesh who currently lack access to affordable, safe drinking water.
Testimonial	*"Drinkwell is thrilled to scale our innovative water atm-enabled filtration system across Dhaka in partnership with Robi and Dhaka WASA, a leading water utility that is on track to become the first megacity in Asia/Africa to provide 100% legal access to safe water for all citizens. We are excited to grow this partnership that will help Bangladesh achieve UN Sustainable Development Goal 6 around the provision of safe water and sanitation for all by 2030."* **Minhaj Chowdhury, Founder and CEO**

Sanitation

Name of the organisation	**Kampala Capital City Authority**
Name of project	Using Technology to improve sanitation service delivery in Kampala City
Project location	Uganda
Partners	National Water and Sewerage Corporation, GIZ
Type of grant	Market Validation
Description	The purpose of this grant is to improve access to safe and reliable feacal sludge collection and transportation services for the residents in the informal settlements of Kampala city, Uganda. The grant will upgrade the pilot GIS tracking system enabled by a mobile application and call center, build capacity and promote pit emptying business in partnership with National Water and Sewerage Corporation, GIZ and the private emptiers associations that will use information and mobile technology (including mobile money) to empty pit latrines.
Testimonial	*"KCCA is pleased to be selected among the winners of the GSMA Mobile for Development Utilities Grant. This grant will be used to enhance public participation in ensuring quality service delivery in sanitation and waste management."* **Jennifer Semakula Musisi, Ph.D, Executive Director, Kampala Capital City Authority .**

Sanitation

Name of the organisation	**Practical Action Bangladesh** PRACTICAL ACTION Technology challenging poverty
Name of project	1Service: Mobile enabled platform to deliver water and sanitation municipal services
Project location	Bangladesh
Partners	Robi Axiata
Type of grant	Seed
Description	The purpose of the grant is to launch a mobile based utility services platform in partnership with Practical Action Bangladesh, Robi Axiata Ltd and municipalities, that will use mobile technology to provide improved water and sanitation related utility services to the residents of the municipalities. This platform will give customers convenience to request for municipal services using their mobile phones and pay using Robi cash mobile wallet.
Testimonial	*"Practical Action has years of exclusive experience for implementing city-wide Faecal Sludge Management (FSM) services. We have introduced e-FSM services through which, anyone can request for pit emptying services using a web application and a dedicated call centre. Building on this, we are launching 1Service application in affiliation with Robi Axiata ltd., one of the largest telecom operators of the country. 1Service digitally offers an integrated municipal utility services including, but are not limited to, water supply, sanitation, waste management and FSM in 3 cities, ensuring customer satisfaction. 1Service allows the low-income population, including slum dwellers, to avail the services at an affordable cost. We see the enormous potentials of this initiative to reach the citizens of all the municipalities and city corporations to access improved utility services. We believe that our unique effort will bring a visible contribution to the Government's vision on digital Bangladesh. GSMA deserves appreciation for supporting this noble venture."* **Hasin Jahan, Country Director Practical Action Bangladesh**

Sanitation

Name of the organisation	**Svadha** **SVADHA**
Name of project	Svadha Powered by SaniMark
Project location	India
Partners	N/a
Type of grant	Seed
Description	Svadha is a social business building better rural sanitation markets through aggregation and innovation of quality sanitation products and services which are delivered through an army of entrepreneurs and facilitated by ICT. With GSMA, Svadha is developing and launching SaniMark, a platform to integrate and enhance the sanitation ecosystem through ecommerce and customized, data-driven business support for entrepreneurs.
Testimonial	*"After years of working closely with sanitation entrepreneurs, Svadha is excited to finally help entrepreneurs address their core business management needs. This new opportunity for deeper engagement and support will help entrepreneurs grow their businesses and reach more sanitation consumers with quality sanitation products. We envision providing access to a variety of sanitation-related products through SaniMark and invite other companies to join us in reaching this vast market."* **Jessica Brooks Head of Innovation & Strategic Partnerships**