DFID Review of Digital in Development Programmes

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"The Internet has changed everything. Digital is the technological enabler of this century."
Mike Bracken, Executive Director of Digital for UK government

1. Introduction

The Digital Advisory Panel (DAP) commissioned this review of how digital is used in DFID programmes. The purpose of the review is firstly to benchmark DFID's current activities on digital and secondly, to support the development of an overarching vision for our digital work in programmes. This will inform a shared sense of where we should focus our efforts both strategically and thematically (See definition of digital at Annex A).

In Autumn 2014, we carried out a series of discussions with 35 interviewees (Annex B) with the aim of creating an overview of key strategic issues and the scope of the use of digital in development programmes. This report proposes clear priorities and options for tangible progress and decisions.

The interviews were with staff involved in digital programmes, both in DFID and among key partners (NGOs, donors, foundations, private sector). We used a knowledge-sharing grid as the basis of our discussions, which we now plan to develop into an interactive tool (see the Digital in Programmes Grid in Annex C). Insights also came from a staff Digital Quiz, Policy Profession consultation, Government Spending Controls and a high level NGO workshop.

Our headline conclusion in this review is that **digital technologies can add value to our development interventions to help us reach greater numbers of poor and marginalised people more quickly and cost-effectively**.

The rapid expansion of mobile phones and internet access in poor countries offers unique opportunities to stimulate growth, enhance peoples' experience of services and as citizens, involve them in our work, cut fraud, help them hold governments and other institutions to account and support them better in humanitarian emergencies.

"The digital agenda is becoming a 'must do', rather than a 'nice to do'. We're being asked to do more with less or the same and the only way to do this is to do things differently – including through digital" Tim Robinson, DFID NED

This paper sets out key issues and recommendations, and outlines what success would look like.

2. Key findings

We found a general consensus across our staff and external partners that digital presents huge opportunities for helping many more poor people benefit from development interventions more quickly and for better value. However, most agreed there are also significant barriers to success and issues that need to be addressed.

Outlined below are the three **overarching issues**:

1. **Access to mobile/internet**: One of the biggest barriers to success across all areas is the challenges faced by the poorest and most marginalised in having access to quality and affordable internet connection. Access is not just about infrastructure (electricity,

mobile network, internet connectivity), and affordability. It is also about digital literacy and ensuring that digital communication channels, content and delivery are relevant and understandable to the less-connected, less literate users.There are issues too which only governments can solve, around regulation, intellectual property rights, standards and international co-operation, and donors can play a significant role in bridging the gap between governments and private sector.

2. **Co-ordination - both within DFID and among donors, and knowledge and evidence sharing across sectors:** While there is significant investment in digital for development interventions, knowledge is not being systematically shared. This is true both across sectors and between donors and partners, despite there being an appetite to do so. It means we may not be getting the best value for our money or the most effective implementation through the reuse of successful interventions or common procurement. Furthermore, a lack of co-ordination between donors in overcrowded sectors like mHealth could be holding back sustainability and scale up.

3. **Capability:** The varying levels of knowledge and experience particularly amongst DFID staff, but also delivery partners, governments and regulators in exploiting the benefits offered by digital is another key barrier to success. Issues include fear of risk, entrenched attitudes and behaviours, and misinformation.

Data: besides the three issues above, which we go into more detail in the body of this report, another big area is data. This is the subject of a parallel workstream so we will not include details in this report, but are clear that the teams responsible for implementing activities to address digital and data challenges will need to work closely together.

Thematic overview
Alongside the identification of overarching issues that affect all digital programmes, we also looked at the different sectors where digital interventions are part of programmes.
  a) **We found significant investments in using digital in our programming across virtually all sectors.** There is currently no way of confirming absolute numbers of programmes although based on previous research, numbers of programmes passing through digital spend controls and interviews held as part of the review we estimate DFID is currently funding well over 160 programmes, which are either wholly or have some significant digital element. (Definitions vary and current databases such as Development Tracker do not contain the appropriate filters for an accurate simple search).
  b) **Projects range from major investment** in programmes where digital is intrinsic to success such as Making All Voices Count or further rollouts of Mpesa-type models**; to smaller projects which are part of a bigger programme**, or funded via Challenge Funds. The latter might include SMS, biometrics, smartcards or geomapping to deliver a small part of a wide-ranging programme.
  c) **Digital is prevalent across sectors such as mHealth**, mNutrition, education and humanitarian, but there are coordination and scale up issues.
  d) **We found recognition that the evidence base is patchy** and more work needs to be done. An initial priority is to develop agreed standards for measurement of impact.
  e) **Despite some examples of individual success, there seems to be an overwhelming focus of resources on vertical level pilots and programmes.** This is in contrast to other donors such as USAID, Gates, SIDA and GSMA who are increasingly running global level advocacy or co-ordination programmes eg. the multi-donor Mobile Hub, USAID's mPowering frontline health workers programme and GSMA's Digital Inclusion programme.

3. What will success look like?

We recommend updating our vision when the Digital Strategy is refreshed in 2015, along the lines suggested below:

> **A new vision**
>
> We have a vision of the future where we as an organisation will be well equipped to use digital technologies in our work with poor people and our digital culture is user-centred, innovative and responsive. Where we can negotiate for and promote improved conditions that will support the access to and diffusion of digital technologies worldwide and where the ecosystem will be supported and co-ordinated to enable scale up and replication of successful interventions.
>
> We want to ensure the poorest and most marginalised people in developing countries benefit from the added value digital can bring to our aid and development work. We intend to take advantage of the power of digital to have a bigger, faster and cheaper impact on the lives of poor people - bringing solutions to scale so development products and services reach the poorest.

To achieve this vision, we suggest focussing on improving the three key areas identified above: **access; capability; and coordination and knowledge sharing**, as shown in our Theory of Change below.
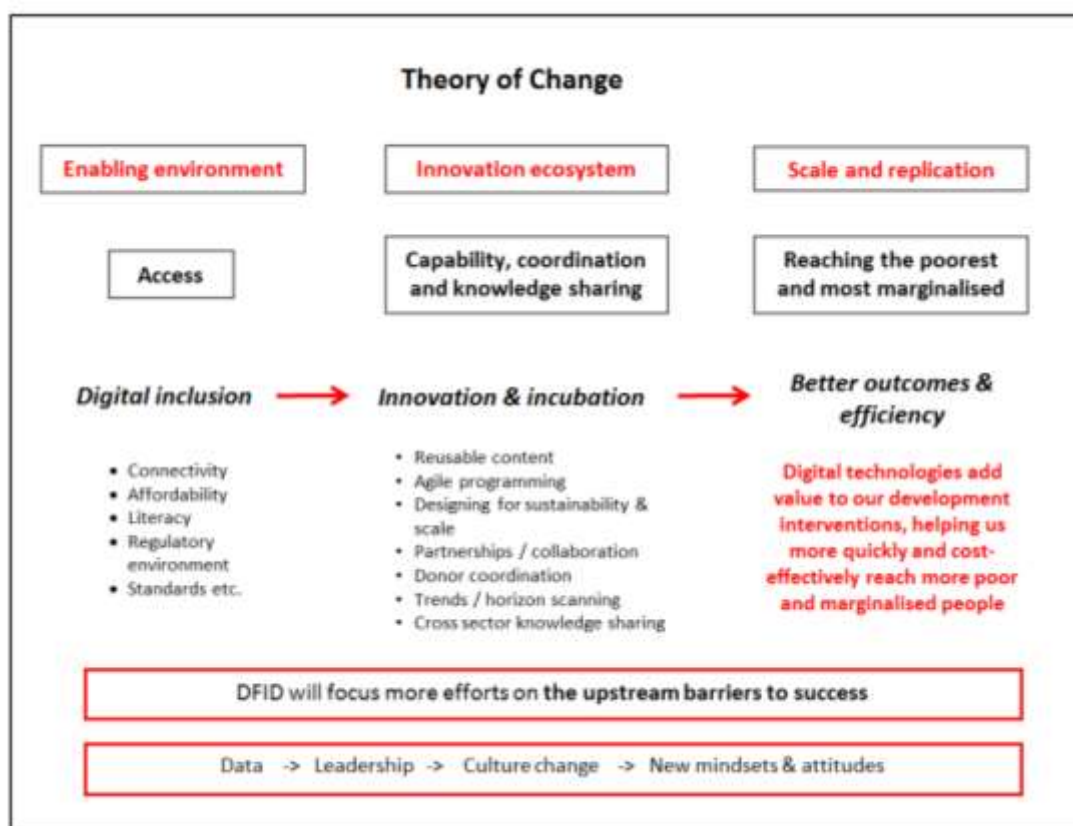
Getting our own house in order and working closely with partners at a global level will be equally important in achieving this. Success will look like this:

a) **Our own house will be in order:** Digital will be mainstreamed and professional. Staff will have more capability and confidence in using digital in programmes (which could be benchmarked and measured by an evolving Digital Quiz). Knowledge and evidence will be systematically shared between sectors and on specific interventions (e.g. smartcards, mapping) and achieving best practice and better value for money. We will be clear on our positions on key strategic issues. We'll have a clear overview

of how much we're spending and on what. Programmes will be more flexible, user centred and tackling specific problems. Successful interventions will be reused.

b) **Co-ordination will be improved:** Knowledge will be shared between donors and across government to ensure common platforms are procured and reused, and lessons learned. DFID's leadership role in partnerships will influence the creation of better enabling environments and standards. Systems will be interoperable. Donors will focus on ensuring no one is left behind, enabling sustainability and scale up.

4. Key recommendations

Initial practical steps for 2015:
a) Improve the skills and confidence of DFID staff in programme design and encourage conversation around risk and failure, through our Year of Innovation and Learning.
b) Carry out the proposal detailed in annex C, to continue work on the grid and turn it into a working tool. This could in turn inform development of a mechanism to benchmark what DFID and others are doing and help us explore how we might work together on the big issues at a global level.
c) Continue allocating central resource and build a community of practice to facilitate sharing of evidence, successful interventions, good practice and skills – starting with the current Innovation & Tech Network.
d) Become clear on our positions for overarching issues, making sure these are reflected in the new cross-government digital strategy, and take a leadership role on endorsing standards, such as UNICEF's Innovation Principles, or driving the development of new ones such as around measurement of impact.
e) Improve co-ordination of programme planning, internally and with other donors – resulting in better procurement and re-use of proven interventions.
f) Promote the work of the Digital Advisory Panel and look for opportunities for individuals to get more involved in advising specific programme areas.

We will continue to provide professional advice on and approve digital spending in programmes, ensuring it complies with the Government Digital Service design principles and controls. Our focus will be to encourage DFID programme teams and their suppliers to seek advice earlier in the design stage and learn lessons from digital technologies introduced in other DFID programmes. Re-using tools and sharing techniques proven to work will lead to faster and better value results on the ground.

More detail is outlined in the workplan at Annex D.

What more could be done?

The review points to the significant risk of not getting the full benefits of specific digital investments in sectors unless more progress is made in some of the overarching issues. We have identified three areas for possible greater action mirroring the three big challenges of access, coordination and capability.

Greater ambition on connectivity – coverage and access
Aim for 100% coverage by 2025:
- Bring together ideas proposed by mobile sector (which even in UK currently only go as far as 95%), build on fibre networks, and help pilot, scale and grow innovative and other promising technologies that offer affordable rural connectivity (such as satellites - including innovative projects like Google balloons - and TV white spaces).

- Better mapping will show final gaps in coverage, and can inform investment. Look at which devices to endorse in order to ensure costs continue to reduce.
- Close liaison between Government and private sector is needed to cover regulatory barriers and commercial viability: neither can do it alone. Even the UK Government is investing over £5bn in guaranteeing broadband and mobile coverage to 90% of this country.
- Pairing up: we could propose more initiatives which partner the best of British with government departments in poor countries eg Ofcom who worked with the regulators in South Africa (see page 8 & 11).

On access: "in 40 per cent of countries a basic fixed-broadband subscription still represents more than 5 per cent of household income for over half of the population. An enabling telecommunication regulatory environment can significantly influence the affordability of services. The price of ICT services falls with better market regulation and increased competition. For example, in developing countries, fixed-broadband prices could be reduced by 10 per cent and mobile-cellular prices by 5 per cent if competition and/or the regulatory framework improved" [MIS report, ITU 2014].

A global movement for collaboration
Stimulate a movement which brings different sectors together in different ways. Facilitate ways to share best practice, data, standards, regulations and guidance. Look at promoting activity in the best initiatives that are germinating at the moment:
- Help steer development of the Mobile Hub (United Nations Foundation), bringing together donors (government, multilateral organisations, philanthropic, private sector foundations)
- Developments at BOND, better NGO collaboration
- GSMA (global body for Mobile Network Operators (MNOs) digital inclusion programme
- D5: an international network of like-minded governments working on digital transformation of public services. The founding members are Estonia, Israel, New Zealand, South Korea and the United Kingdom. Create a Dev-D5 (Nigeria, Kenya, India, Ghana, Brazil?).

Scaling up our ambition around capability
Build on the best current individual initiatives and ideas – how far could we go?
- Fellowships programme for DFID and beyond (partners, country governments, technology colleges). Build on Code for America model (shared by Omidyar Network, which is potentially a fantastic private/public sector partnership opportunity)
- Expand and export the DWP digital academy model
- Code Clubs (inspiring young people, plus opportunities for workforce too)
- Support to entrepreneurs (Microsoft Tech Ventures, Barclays Accelerator)

If we can make progress on access, the potential benefits are huge for the power of digital to have a bigger, faster and cheaper impact on the lives of poor people – bringing solutions to scale so development products and services reach the poorest. If there is little progress on access, benefits will accrue to the already connected rather than the excluded.

Key issue 1: Access

"The Digital Community missed the boat on the access agenda. No one development actor is focussing on this", GSMA

Issue

One of the biggest barriers to success across all areas is the challenge faced by the poorest and most marginalised in having access to quality and affordable internet connection. Women and people in rural areas are at risk of being left behind in a growing 'digital divide'.

> *"DFID should play a leading role in affordability, which fits with our strong pro-poor and women's rights focus"*, DFID staff

Access is not just about infrastructure (electricity, mobile network, internet connectivity), and affordability, but also digital literacy and making the digital communication channels, content and delivery relevant and understandable to the less-connected, less literate users.

The private sector (mobile operators, mobile banking companies etc) can, and are, opening up markets to a certain extent, but there are issues too which only governments can solve, around regulation, intellectual property rights, standards and international co-operation. Donors can play a key role in bridging the gap between governments and private sector.

> *"DFID needs to put pressure on governments to embed increased access into conditions"*, Stephen King, Omidyar Network

Fact box

Women are 21% less likely than men to own a mobile phone in low to middle income countries, where there are 300 million fewer female mobile phone subscribers.

In Africa, internet penetration is estimated at 15.6%, compared to a world average of 34.3%.

Best practice examples

Alliance for Affordable Internet (A4AI)

Issue: Advocacy for affordable **access to the Internet** in developing countries

Solution: A4AI brings public, private and not-for-profit sectors together to create policy and regulatory solutions that drive down the cost of Internet access. In less than a year, the Government of Ghana has committed to abolishing import taxes on smartphones.

UK mobile connectivity

Issue: UK government secures better coverage for UK mobile phone users

Solution: The DCMS and BIS are investing £5bn and have secured an agreement with all four UK mobile network operators (MNOs) to improve coverage by 2017 and to accept a geographic coverage obligation that will be legally binding. It will ensure better mobile coverage for the UK, particularly in 'partial not-spot' areas (where some mobile operators, but not all, have coverage). The obligation will require each MNO to provide voice coverage in at least 90% of UK landmass, and many will have better data coverage.

M-Pesa
Issue: Encouraging M-Pesa **scale-up** outside Kenya
Solution: DFID is providing technical assistance to encourage market demand for M-Pesa across Africa e.g. encouraging governments to pay welfare payments using mobile money.

Additional recommendations

a) **Become clear on our positions for key strategic access issues** and identify where we can take a leadership role eg. on standards, such as UNICEF's Innovation Principles

b) **Explore private sector approaches to connectivity** for low income communities. Work with businesses to test new delivery models, and help scale approaches that facilitate affordable access.

c) **Work with governments on the regulatory environment**: including lowering the barriers for technologies that can benefit lower-income users, and assist governments to efficiently and sufficiently use private sector capital locked in Universal Service Funds. Help governments develop and implement universal broadband plans and meet international commitments and goals, set by the UN and MDGs.

d) **Work with the private sector, governments and other stakeholders to build the right regulatory environment and market conditions** to increase private sector investment in connectivity where it matters: for business and lower income users. Support policy that promotes open, affordable access. Including **renew our Alliance for Affordable Internet (A4AI) subscription**.

Key issue 2: Coordination and evidence and knowledge sharing

Issue

While there is significant investment in digital being used in development interventions, knowledge and evidence is not being systematically shared. It means we may not be getting the best value for our money or the most effective implementation through the reuse of successful interventions (eg. smartcards for money transfers) or common procurement. This is true across sectors and between donors and partners, though there is an appetite for this.

> *"Reusability is gold standard. It is vital for DFID to keep our voice in the global digital agenda",* Tim Robinson

A lack of co-ordination between donors in overcrowded sectors like mHealth is holding back scale up with limited incentives to drive financial sustainability and the sector is bombarding users with 'development spam' (eg. multiple SMS health and nutrition messages to mums).

> *"Donors should only fund projects that reuse existing platforms and approaches and they should insist upon collaboration",* mPowering Frontline Health Workers

The professional advice provided by the digital spending controls process (Smart Rule 14) is seen as valuable by teams and ensures better value for money and focus on user needs. However, just over half of staff are aware of the spending controls process and it is not picking up all digital spend. Teams do not always look at what approaches have worked in similar sectors.

Fact box

Over 70 unrelated mhealth pilots in Uganda led to the government placing a moratorium on any further efforts without coordination and the participation of the Ministry of Health.

Over 1,800 M4D applications and services have been launched in the developing world, yet coordination between these initiatives remains limited.

Best practice example

mPowering Frontline Health Workers

Issue: Lack of **donor coordination, scaling, reuse & interoperability** of mHealth programmes.

Solution: USAID partnership, mPowering, is a global platform for all health training content to be downloadable by mobile operators, NGOs, social enterprises, health training institutions and governments. Known as the 'Amazon for the health sector', it improves coordination and integration, reduces duplication and facilitates interoperability.

Additional recommendations:
a) **Explore a mechanism to monitor and horizon scan** what DFID and others are doing and how we might work together on the big issues at a global level, eg. continue discussions with BOND (NGOs), GSMA (private sector), Mobile Hub (donors) and HMG.
b) **Improve co-ordination of programme planning**, internally and with other donors – for better procurement and re-use of proven interventions, eg. business cases for developing **interactive tool** and **Mobile Hub** strategy phase. Year 1 cost: $4million.
c) **Improve DFID best practice by encouraging knowledge and evidence sharing and reuse** of 2-3 practical interventions eg. smartcards, and using the ed tech review as a model.
d) **Ensure programme managers and advisors are required to seek advice** through the spending controls when writing business cases, rather than just before procurement.

Key issue 3: Capability

Issue

The varying levels of knowledge and experience, particularly of DFID staff, but also delivery partners, governments and regulators in exploiting the benefits offered by digital is another key barrier to success. Issues include fear of risk, entrenched attitudes and behaviours, and misinformation.

> *"The lack of understanding of digital and its issues make people risk averse",* DFID staff

DFID staff feel they have insufficient knowledge of digital and innovation. Understanding the skills gaps of our staff through our Digital Quiz (see box below) will allow us to prioritise a more effective range of interventions. For example, the need for knowledge of Agile project management and Programme Manager expertise in using digital tools could deliver big improvements to programme and project management.

Country governments vary in how well they incentivise industry and create the right conditions for private sector investment. Training a future technological generation of entrepreneurs in Africa is needed. NGOs realise they need to collaborate with innovative partners to keep ahead of the curve.

> *"DFID needs to promote the understanding and use of technology and to increase dialogue across sector areas",* UN Foundation

Fact box

Selected results from staff Digital Quiz:

- Only 10% of programme managers consider themselves "expert" in using digital tools
- Only 37% of responders are aware of Agile project management principles, with just one fifth actively involved in Agile methods
- 41% of PMs actually use digital tools to support the delivery of programmes
- Over a third of staff would like to learn how to engage effectively with suppliers online

NGOs feel excited by the opportunities of digital, but overwhelmed by the speed of change and are concerned about their ability to keep up.

Best practice examples

Code for America Fellowships

Issue: Lack of government **staff capability** in using, understanding and developing digital technologies.

Solution: Code for America runs a fellowship programme to strengthen key capabilities within local government and communities so staff can design services for and with the community, making data meaningful, and making better technology choices.

MAMA Alliance mHealth Mobile Messaging Toolkit

Issue: Lack of available information and guidance for mHealth project implementers, limiting health workers' **capability**

Solution: The "mHealth Mobile Messaging Toolkit" provides practical frameworks for global health program implementers to evaluate the best solution for an mHealth project. It

contains practical step-by-step questions to consider when planning and selecting the most appropriate communications supplier and application for use in a particular behavioral change intervention or country.

ICASA/OFCOM TV White Space Technology
Issue: Lack of **capacity and knowledge** of TV White Space technology, implementation and licencing.
Solution: Through the Investment Facility for Utilising UK Specialist Expertise (IFUSE),the Independent Communications Authority of South Africa (ICASA) received assistance from OFCOM in June 2014 to build capacity and knowledge of TV White Space technology, implementation and licencing. The UK is at the forefront of policy in this space, with the technology providing one potential for the spread of affordable internet access to low-income users in developing countries. The collaboration has helped South Africa to be one of the leaders driving change in this space on the African continent.

Additional recommendations:

a) **Improve the skills and confidence of staff** in programme design and encourage conversation around risk and failure, through the **Year of Innovation** in 2015 (including package of learning activities e.g. workshops, toolkits, seminars, training sessions, digital for development day, leadership involvement etc), as also recommended by Policy Profession consultation.

b) **Provide professional advice and best practice inspiration** to support programmes in very early design stages, by promoting the **Innovation Smart Guide**, Smart Rule 14 and the benefits of spending controls, business / partner/supplier digital checklists and with tailored learning guidance from the Digital Quiz.

c) **Build a community of practice** to facilitate sharing of evidence, successful interventions, good practice and skills building, through the **Innovation & Tech network** and agreeing additions to **job objectives** with Heads of Profession / Offices.

d) **Explore opportunities for Digital Advisory Panel (DAP) members to advise** on specific interventions e.g. through spending controls process.

e) Create **Digital Fellowships Programme** inspired by Omidyar Network's initiative in the US and Code for America.

f) **Explore ways for UK Government to support country governments and regulators** to motivate mobile operators to invest in improving service delivery and address core policy issues they face.

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Annexes:
A. Definition of digital
B. Interview extracts
C. Digital in Programmes Grid
D. Detailed recommendations and workplan
E. Terms of reference of the review

Annex A: Definition of digital

The basic attributes of digital technologies (also refered to in international development circles as Information and Communication Technologies for Development (ICT4D)) are: connectivity, communication, and information.

Our emphasis is on how we use the more recent, and fast-growing digital communication technologies (mobile phones and Internet) that allow people and organisations to communicate and share information digitally.

Tools and approaches include:
Mobile – SMS, apps, Interactive Voice Response (IVRs), mobile money, solar-powered phone chargers, low cost smartphones
Internet – websites, social media, knowledge platforms, databases, management information systems
Data – open data, big data, data collection, data mining, data monitoring, analytics
Activities (supported or enabled by digital tools) – crowd sourcing, geo mapping, user feedback, e-learning, information dissemination, real time monitoring, low cost diagnostics
Emerging technologies – smartcards, biometrics, 3D printing, Google glass, wearable tech, TV white space, unmanned aeriel vehicles (drones, satellites)

Annex B: Digital Review discussion extracts

External partners:
> There is a lack of information sharing, within and across sectors – DFID needs to promote understanding and use of tech and to increase dialogue across areas/sectors.

> There need to be evidence driven approaches to scaling over pilots and anecdotal evidence to help overcome silver bullet problems.

> Reusability is gold standard. It is vital for DFID to keep our voice in the global digital agenda.

"#D5London v inspiring. Top 5 #digital govs agree to make things happen on connectivity, markets, education, security"

> Leadership is important in global alliances to ensure co-ordination and collaboration.
> The Mobile Hub will avoid being sector specific and will look at systemic needs best served across sectors.

> DFID should take a strategic global role in relation to work on digital
> DFID needs to put pressure on governments to embed increased access into conditions

> There is significant underfunding of upstream initiatives - donor investment is very client focused and pilot-centred.
> There are few incentives for organisations to use off the shelf solutions if they are being funded to create something new, reflecting a lack of donor coordination.

> The Mobile Hub needs to be involved in the early stages of creating and shaping the digital grid.

> The development community has missed the boat on the access agenda. No one development actor is focussing on the access agenda.
> The international community needs a mechanism to work together to prioritise how to deal with constant wave of new innovations and sets of issues
> The world is expecting government and industry to collaborate.
> We need to find ways to motivate mobile operators to make investments and for governments to support them by addressing core policy issues they face.

> For ongoing sustainability we need better coordination and agreements with global network operators rather than current ad hoc relationships.
> There is 'development spam' from too many incentives from donors including mobile messaging targeting the same people.

> Rapid change is happening. Staying still is not an option
> We aspire to lead change in the world. We need to be ahead not catching up
> We need a shift in mindset to embrace this change asap.

DFID Staff:
> There is a disconnect between what is happening/what the issues are and what people think. There is a lack of understanding of the issues by those unfamiliar with digital/ICT. It is often seen as a risky area.

> There are barriers in the regulatory environment: financial regulators are unaware of digital financial services and their impacts.

> Key barriers to success include access, affordability and financial sustainability. Financial sustainability is hard to drive if so much donor investment available.

> We need to build awareness of digital among people who could be involved over the longer term.

> There is a tension between digital enthusiasts and sceptics - no shared skill set.
> We need to establish clear/common motivations when collaborating to ensure donor coordination.

> Issues relating to safety and ethics, particularly in relation to youth populations - youth are less aware of the risks associated with online activity e.g. using full name.

> Grantees (e.g. GSMA) have data but often only given in anecdotal format - they don't have robust information that DFID can use. We don't push the organisations to do things with the data they collect. Do grantees have the technical capabilities to process the data?

> Key issue of access by the poor: energy, data, information, assets e.g. phone chargers
- Issue of affordability

> Many of these initiatives are funded at pilot scale and either abandoned or rolled out with little regard to what works where, when, why and under what conditions.
> We need greater harmonisation amongst actors so not to continually reinvent the wheel.

> Key barriers to success include skills/capabilities within DFID and a tendency to use what's been done before.
> Need practical tools e.g. digital checklist to ensure digital opportunities are exploited.

> Data issues: Data safety/storage/ethics - unique identifiers (personalised codes) are being used in some areas for anonymity; Lack of data on disability; Data rich sector but it doesn't always flow.

> We need to focus on objectives before deciding how digital can help – e.g. behaviour change; awareness-raising.
> Digital shouldn't just be done for the sake of it. We shouldn't be blinded by the utopia
> There needs to be an increased donor role in showing how digital technologies can facilitate anti-corruption interventions
> Knowledge sharing is currently done at the sector level so we don't always know what's going on – we need to nurture relationships with big organisations e.g. Omidyar Network.

> There is a lack of co-ordination and common procurement.
> Spending Controls and GDS Design Principles are not seen as a 'must' by Smart Rules team.

> Key barriers: Data quality and availability (hard to reach areas); Type of data collection e.g. measuring access as opposed to impact; Money spent on tech can be seen to have been taken away from something else.

> Lack of knowledge sharing and lesson learning - poor sharing within cadres as well as across the organisation.

> Access to information/tools is one thing, but getting people within DFID to actually use/read it is another problem all together - behavioural change issue.

> Coordination issue - how can we avoid duplication of interventions?
> Lack of consistent and robust knowledge and evidence of what works.

> Donor-heavy sectors (health, education etc.) are not as digital as other sectors - donors traditionally haven't had the knowledge, skills etc. to build this into programming

> DFID should play a supporting/enabling role in terms of its engagement

> There is a lack of interoperability in this area. Other organisations are developing similar things but they need to operate together.
> There are perceptions of digital as a risky area for investment. We need to encourage investment in this area and clarify ambition.
> Solutions are being created in search of a problem.

> There is a lack of linkages with the private sector. Most projects are with the private sector but few relationships exist e.g. with mobile phone network providers.

> Lack of coordination - Similar data is being used in a few different sectors but they aren't talking to each other.

> There is a lack of DFID staff understanding/knowledge to ask the right questions when procuring e.g. assessing value for money.

> We need sector collaborations e.g. between mobile phone operators and banks as they have different regulators so need coordination.

> Access is a key issue that is being overlooked.

Annex C. Digital in Programmes Grid

The grid that follows grew from the material we used to frame our discussions with policy and programme colleagues, and external partners. It evolved over the 4 weeks of meetings, and attempts to map the different facets of digital work:

- overarching issues that affect all programmes,
- communities reached or affected,
- different sectors across DFID and the people responsible for them, and
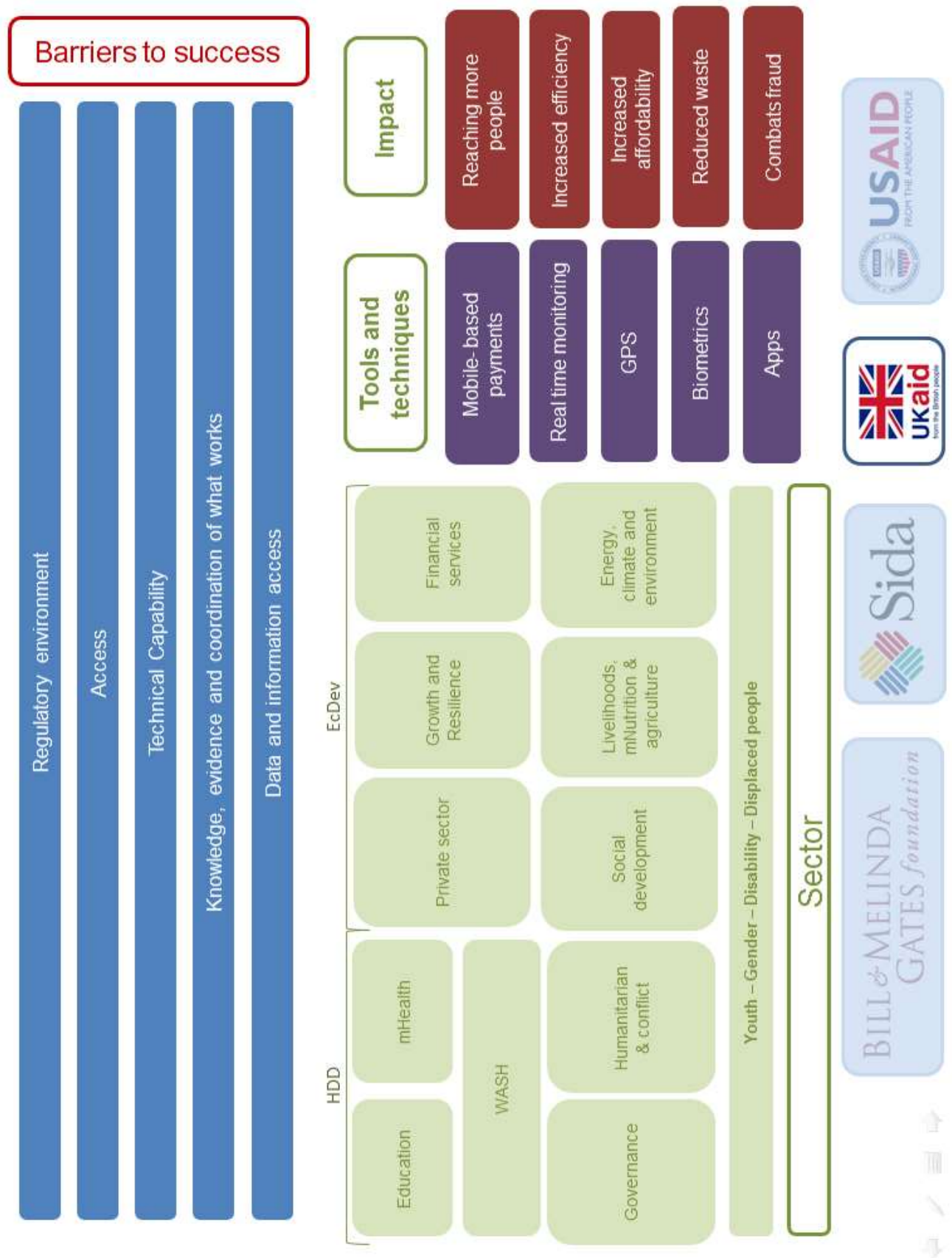- different tools and techniques that are in use.

As discussions continued, it became clear that this model worked for people, and was already close to becoming an alpha for a tool which would support staff as they tried to identify what was being done, what was working, the results being achieved and where the points of expertise were.

Proposal

We recommend continued working on this alpha version. Next step will be to build a business case to put to BSD for its development into a tool which would help staff and achieve the objectives of better co-ordination and levels of knowledge. Another user need it could meet is to answer questions from external sources about the level and range of investment into digital in our programmes.

Issues

- Sustainability. This can be addressed if we work closely with colleagues who are developing the Aid Management Platform and other sources of DFID programme information so the tool is not a standalone product
- Including data from partners. This will be more difficult. We will look at options with our closest partners who have active digital programmes eg USAID, SIDA, Gates and others.

Barriers to success

- Regulatory environment
- Access
- Technical Capability
- Knowledge, evidence and coordination of what works
- Data and information access

Impact
- Reaching more people
- Increased efficiency
- Increased affordability
- Reduced waste
- Combats fraud

Tools and techniques
- Mobile-based payments
- Real time monitoring
- GPS
- Biometrics
- Apps

HDD
- Education
- mHealth
- WASH
- Governance
- Humanitarian & conflict

EcDev
- Private sector
- Growth and Resilience
- Financial services
- Social development
- Livelihoods, mNutrition & agriculture
- Energy, climate and environment

Youth – Gender – Disability – Displaced people

Sector

USAID
FROM THE AMERICAN PEOPLE

ukaid
from the British people

Sida

BILL & MELINDA GATES foundation

Annex D: Full list of recommendations and workplan

Recommendations are ordered according to levels of engagement and those in bold are the areas we feel should be prioritised.

Initial steps:

1. **Provide professional advice and best practice inspiration to support programmes in very early design stages:**
   a. Raise awareness of Innovation Smart Guide, Smart Rule 14 and the benefits of spending controls, business / partner/supplier digital checklists and with tailored learning guidance from the Digital Quiz.
   b. Set up core working group (Innovation and Business Innovation Teams)
   c. **Build a community of practice** to facilitate sharing of evidence, successful interventions, good practice and skills building, through the **Innovation & Tech network** and agreeing additions to **job objectives** with Heads of Profession / Offices.
   d. Facilitate a wider network of digital advocates to champion use of digital
2. **Increase our efforts on access eg:**
   a. Renew **Alliance for Affordable Internet** (A4AI) subscription
   b. Engage in **discussion with Facebook** and other partners on access
3. Promote work of DAP (e.g. targets and opportunities to present to DFID steering committee)
4. Support Nick as digital champion (e.g. Twitter/blogs/Yammer)
5. Follow up Digital Quiz results and continue to add new learning resources and opportunities

Resources: Could be delivered using existing resources + £320,000pa

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Intermediate:

1. **Build staff and partner capability:**
   a. **Improve the skills and confidence of staff** in programme design and encourage conversation around risk and failure, through the **Year of Innovation** (including package of learning activities e.g. workshops, toolkits, seminars, training sessions, digital for development day, leadership involvement etc), as also recommended by Policy Profession consultation.
   b. Develop more rigorous procurement guidance e.g. best practice, reuse, supplier advice
   c. Use the professional development opportunities offered by our new Policy Profession
2. **Improve best practice:**
   a. Improve DFID best practice by encouraging knowledge sharing and reuse of 2-3 practical interventions eg. smartcards and mapping.
   b. Facilitate opportunities for more experienced sectors to support emerging sectors
   c. Explore opportunities for DAP members to advise on specific interventions e.g. through spending controls process
   d. **Ensure programme managers and advisors are required to seek advice** through the spending controls when writing business cases, rather than just before procurement.
3. Identify, in discussion with partners, where there is a lack of evidence, and commission

research.

4. **Become clear on our positions for key strategic access issues** and identify where we can take a leadership role eg. on standards, such as UNICEF's Innovation Principles

5. **Further explore and map lessons learning and what is being done**:
   a. Engage in discussion with key donor and foundation partners to build a global digital picture – populate knowledge-sharing grid with activity
   b. More in-depth mapping of policy areas and access in country e.g. climate change (possibly by DESAs)
   c. Explore opportunities to improve relationships with partners and donors

Resources: *Needs additional resources to be committed or redistributed (eg. from vertical to horizontal)*

Advanced:

1. **Improve co-ordination of programme planning**, internally and with other donors – for better procurement and re-use of proven interventions
   a. Develop and submit **Mobile Hub** business case
   b. Identify areas for **DFID to lead on e.g. standards/innovation principles,** IPs, infrastructure, connectivity; things for submission
   c. **Engage in discussion with Facebook** and other partners on access.
2. **Commission research to fill gaps in evidence**
3. **Explore ways for UK Government to support country governments** to motivate mobile operators to invest and address core policy issues they face.

Resources: *Requires significant investment*

Innovative:

1. **Explore developing knowledge sharing grid into interactive tool** (potential BSD Board business case – up to £10K)
2. **Explore opportunities for DAP members to advise** on specific interventions e.g. through spending controls process and to create **Digital Fellowships Programme** inspired by Omidyar Network's initiative in the US and Code for America.
3. **Scope potential for infrastructure support** e.g. Innovation hubs; business schools; science and technology higher education in Africa
4. **Look for opportunities to scale up/replicate successful projects** e.g. mTrac to cross-Africa malaria mapping; technical assistance to accelerate investment in MPesa.
5. **Explore a mechanism to monitor and horizon scan** what DFID and others are doing and how we might work together on the big issues at a global level, eg. continue discussions with BOND (NGOs), GSMA (private sector) and Mobile Hub (donors).

Resources: *To be scoped out*

Annex E : Digital Review of Programmes Terms of Reference

Background:
The Digital Advisory Panel (DAP) has commissioned a review of how digital is used in DFID programmes. The purpose of the review is firstly to benchmark DFID current work on digital and secondly, to support the development of an overarching vision for our digital work in programmes and a shared sense of where we should focus our efforts both strategically (e.g. global issues of access, affordability) and thematically (e.g. education and anti-corruption).

This builds on earlier work for the Secretary of State and the DAP:
- The DAP was consulted on where DFID should focus its digital efforts
- Submission was put to Secretary of State.
- She agreed that a focus on 1) access 2) data revolution 3) reaching the most vulnerable 4) support to innovation/social entrepreneurship was sensible and requested more information.

Objectives:
The key objective for the end of November is to prepare two elements:
- Overviews of a range of key thematic areas where DFID is active (or not) building on mapping work to date. The review will start with a long list of possibilities, but will only be able to cover a certain number in any detail. These outlines will also highlight some strategic international alliances.
- Succinct articulation of strategic issues that DFID needs to "take a view on" in prep for the post-2015 agenda. This will position the key issues according to maturity and opportunity for DFID to have an impact.

Governance
- Oversight to be provided by Nick Dyer (as Digital Champion), supported by Liz Ditchburn and Innovation Hub. Pippa Ranger will work with Julia Chandler, with advice from Jonathan Wong and Louise Thomas. Support from Beatrice Arscott, Innovation Graduate.
- Both the DAP and Digital Steering Committee will be consulted.

Scope
The review will:
- Outline some of the key barriers to widespread adoption and spread of digital in programming (e.g. quality and affordable access).
- Outline the key questions where DFID needs to take a view with the post-2015 agenda in mind (e.g. data revolution).
- Map a range of key thematic areas where DFID is active (or not), building on mapping work to date.
- Map the types of digital technologies that DFID utilises in programmes (or not).

There are excellent examples of digital across sectors and in different regions and where time allows, we will draw on the valuable knowledge and experience of staff, especially our core Innovation & Tech group (thematic and country digital leads), the DAP and external experts and partners (e.g. Web Foundation, United Nations Foundation, Gates Foundation). We will propose areas for further in depth review if required.

Key Questions

Evidence
- Why is digital important? What does the evidence say?
- How can we improve knowledge and information sharing across sectors, donors, partners and countries?

Strategic
- What is DFID's global strategic role (e.g. do we want to increase the evidence base, help spread the best work, or fill gaps where no one else is active?)
- What are the key barriers to success / scale up of digital and mobile work?
- What are the key strategic issues DFID that DFID is best placed to lead on globally (e.g. access, standards, regulatory infrastructure)?

Delivery
- Are we in a position to focus [on topic X or sector Y], or are we still at an experimental phase?
- What are others doing (e.g. donors, private sector) and where are the gaps?
- What are our/their priorities (by sector e.g. mhealth and strategic issue e.g. access)?
- Where do you think the gaps are and/or need for better co-ordination, where could we best focus our efforts?
- What investment opportunities are there?
- How can we as donors improve procurement of digital and mobile through suppliers and partners?
- What could we do within DFID to make digital more successful? What global opportunities are there?

Implementation
- Who will be best placed to implement the recommendations?
- What resources may be needed?

Annex F: UK Government success stories using digital

Avanti Project iMlango – Girls Education Challenge
Focus: Supporting the private sector to extent connectivity to schools across Africa to improve educational outcomes
Activities: Over two years, Project iMlango will provide improved education outcomes to over 50,000 marginalised girls across 195 Kenyan primary schools, supporting 150,000 pupils in total. The project includes high-speed internet connectivity to rural and remote schools, provision of tailored online educational content, electronic attendance monitoring, and more. **Impact:** This strategic partnership with the private sector has enabled connections to be made with education ministries, opening doors to provide greater access and connectivity to the poor and marginalised.

Catalysing Access to ICTs in Africa (CATIA)
Focus: Enabling poor people in Africa to benefit from the opportunities offered by ICT
Activities: The CATIA programme aimed to bring the maximum benefit of Information Communication Technologies (ICTs) to poor people in Africa and to act as a strong catalyst for reform, supporting a package of strategic activities to improve affordable access to the full range of ICTs, from Internet to community radio. It intentionally worked on influencing ICT policy by building capacity among stakeholders, increasing awareness, and lobbying for policy change in more than 10 African countries. **Impact**: The improvement of conditions for political reporting through successful regulatory lobbying and lowering international call charges (by almost 20%) by legalising calls using the internet.

ICASA/OFCOM TV White Space Technology
Focus: Capacity and knowledge building of TV White Space technology, implementation and licencing.
Activities: Through the Investment Facility for Utilising UK Specialist Expertise (IFUSE), the Independent Communications Authority of South Africa (ICASA) received assistance from OFCOM in June 2014 to build capacity and knowledge of TV White Space technology, implementation and licencing. The UK is at the forefront of policy in this space, with the technology providing one potential for the spread of affordable internet access to low-income users in developing countries. **Impact:** The collaboration has helped South Africa to be one of the leaders driving change in this space on the African continent.

Alliance for Affordable Internet (A4AI)
Focus: Advocacy for affordable access to the Internet in developing countries
Activities: A4AI brings public, private and not-for-profit sectors together to create policy and regulatory solutions that drive down the cost of Internet access. **Impact**: In less than a year, the Government of Ghana has committed to abolishing the 20% import duty on smartphones, making handsets more affordable for the poorest and subsequently enabling wider access to the Web.

Pan-African mHealth Initiative (PAMI)
Focus: Using mobile technologies and private sector partnerships to support health initiatives in Africa

Activities: As part of DFID's 'South Africa's Revitalised Response to HIV and Health' (SARRAH) programme, a partnership with GSMA was established to test a platform to integrate mHealth services into programmes.

Impact: GSMA is now adopting the same conceptual framework in 14 sub-Saharan African and Asian countries, focusing on nutrition, health and agriculture. This is a great example of how minimal investment from DFID can leverage millions in additional public-private partnership commitments, resulting in large-scale expansion in South Africa, sub-Saharan Africa and Asia.

M-KOPA

Focus: Increasing access to electricity for the poorest

Activities: M-KOPA is enabling poor people to buy clean energy products in small instalments, using mobile banking platforms such as M-PESA. Pay-as-you-go technology allows consumers to buy solar power for their homes without the usual significant outlay that most cannot afford.

Impact: To date, M-KOPA has had an impact on 165,000 lives and has powered over 100,000 homes in East Africa. In 2014 DFID provided further investment in M-KOPA to fund its expansion, supporting their aim to reach one million homes by 2018.

UK mobile connectivity

Focus: Securing better coverage for UK mobile phone users

Activities: The DCMS and BIS are investing £5bn and have secured an agreement with all four UK mobile network operators (MNOs) to improve coverage in the UK by 2017 and to accept a geographic coverage obligation that will be legally binding.

Impact: It will ensure better mobile coverage for the UK, particularly in 'partial not-spot' areas (where some mobile operators, but not all, have coverage). The obligation will require each MNO to provide voice coverage in at least 90% of UK landmass, and many will have better data coverage.

M-PESA

Focus: Scale up of M-PESA outside of Kenya

Activities: Despite its unprecedented success in Kenya, M-PESA has been unable to reach the same level of scale in other African countries.

Impact: The provision of technical assistance from DFID seeks to enable a more rapid scale-up of M-PESA across Africa, creating large enough markets for it to take off. The encouragement of governments to make welfare payments through M-PESA is one example of how this is taking effect.

GAVI–Vodafone mHealth Initiative

Focus: Supporting health initiatives through mobile technologies and private sector partnerships

Activities: Through a new GAVI-Vodafone partnership DFID has provided US$1.5 m to explore how mobile technology can help increase childhood vaccination levels in sub-Saharan Africa. Plans for the project include registering parents and caregivers and using mobile phones to inform them about the importance of immunisation and alert them when it is time for their children to be immunised. The project is being piloted in Mozambique.

Impact: The aim is to use mobile phones to improve data accuracy, increase immunisation rates, reduce the report lag time from the field and reduce stock wastage.

Girls Education South Sudan (GESS)

Focus: Supporting girls' education in South Sudan and tackling barriers to access.

Activities: Key activities of this project include community outreach and a community-based school improvement programme, including cash transfers to girls and their families and capitation grants to schools. Working closely with the Ministry of Education, Science and Technology (MoEST), GESS has also introduced the South Sudan School Attendance Monitoring System, an SMS-based daily attendance-reporting system for students and teachers.

Impact: This system helps MoEST confirm which girls are enrolled and attending in order to determine who is eligible for cash transfers. It is also used to record the correct number of pupils in a school, on which the capitation grant amount is based.

Regional Malaria Programme for Africa

Focus: Building a connection between the science of spatial epidemiology, which harnesses the latest digital technology and the practicalities of policy decision making.

Activities: The future success of malaria control in Africa depends on the intelligent use of epidemiological evidence, moving away from the dogma that one size fits all. DFID is supporting an African initiative to harness the combined efforts of national malaria control programmes and researchers to assemble and package malaria information for efficient national decision making. Layers of data on malaria transmission and incidence, human settlement, health decision making units, vector species occurrence, seasonal rainfall metrics, health service location and current versus past intervention coverage have been assembled in 8 African countries, with 14 more to follow.

Impact: The mapped products will be shared across the region facilitating further continental collaboration and lesson learning.

Token Administration Platform (TAP) Agricultural Programme, Nigeria

Focus: Use of smartcard technology to increase rural access to agricultural subsidies

Activities: Through the Nigerian Growth Enhancement Support (GES) Scheme, farmers and agricultural dealers have access to agricultural subsidies to drive production, output, and ultimately, the growth of the agriculture sector. The TAP system is using the latest mobile technology to connect online and offline farmers to their local agricultural dealers, enabling farmers in remote regions where there is no network coverage to have access to the GES scheme. TAP accurately records and transfers biometric and credit data, and delivers vouchers to eligible farmers and agricultural dealers.

Impact: This significantly reduces the risk of fraud and ensures that fertiliser subsidies reach the farmers for whom they are intended.

Making All Voices Count

Focus: Harnessing the power of new technologies to make government more effective and accountable.

Activities: Making All Voices Count is an international initiative that is committed to promoting transparency, fighting corruption, empowering marginalised citizens, and harnessing the power of new technologies to make government more effective and accountable. It nurtures innovative approaches to achieve this in a number of ways, including supporting the development of new ideas and the scaling-up of successful initiatives and conducting research to build a base of evidence about what works and why.

Impact: The 2013 Open Call, which sought collaborative proposals, attracted 544 applications, 32 of which received funding. One example is of a project to develop a mobile

application aimed at improving the case management of gender violence survivors in South Africa.