Meeting summary: Development challenges and space technology – are there opportunities for new approaches?

Monday 31st March 2014
UKCDS, c/o The Wellcome Trust, London

Background

The UK Space Agency (UKSA) is proposing to launch a new funding programme (c£80m over 5 years) that could link and fund international development practitioners, researchers and the user community with research and private sector technology providers concerned with satellite technology, telecommunications or other applications of space technology to explore innovative approaches.

UKCDS[1] organised this introductory event, with the aims of:

- Convening development funders, senior researchers and practitioners with representative space technology experts to help start to explore which development challenges would most benefit from such collaborations.

- Providing an opportunity to share knowledge, contribute ideas and identify areas of common interest from the different sectors.

- Helping inform the possible future scope of the potential programme.

Discussion

Maria Cody from UKSA launched the workshop by presenting the rationale behind the proposed programme and examples of earth observation techniques and appropriate satellite technology already being used to tackle major development problems. Maria reinforced the need for projects to harness appropriate, proportionate technological solutions for demonstrable poverty alleviation in countries on the OECD DAC list of ODA recipients[2]. Further details, including information on the proposed call process, can be found in the UK Space Agency presentation from the event.

Discussion on the development challenges, which took up the first half of the conversation, focussed on the following points:

- Capacity strengthening should underpin proposals to ensure sustainability and local, on-the-ground ownership of the project.

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[1] UKCDS is a group of UK government departments and research funders with interests in international development. UKCDS works with all stakeholders to maximise the impact of UK research investments on international development outcomes. We regularly convene researchers, NGOs and private sector organisations to facilitate information exchange and encourage the development of new partnerships.
[2] http://www.oecd.org/dac/stats/DAC%20List%20used%20for%202012%20and%202013%20flows.pdf

- The speed at which technology moves may complicate the precise pathways to impact foreseen in proposals.

- Interdisciplinary collaboration, involving social scientists and technologists together with sectoral (eg health/education) experts, will be essential in ensuring projects adopt holistic approaches.

- Space technologies are already used, and have often been employed on an effective, ad hoc basis in development interventions especially when an immediate need arises.

- The necessary space technology often exists already, but problems of physical infrastructure in developing countries can limit its application.

- Using space technology often involves maximising the potential of simple, ubiquitous technologies, such as mobile money via SMS channels.

- The most important step is the translation of information provided by satellite technology to users who need it, such as extreme poor in remote areas. However even when information or technology reaches end-beneficiaries, they will not always be able to access the new 'solution' due to particular local norms, which must be thoroughly understood.

- The principle of 'do no harm': it is vital to ensure that space technology is inclusive, especially from gender and socioeconomic perspectives, and does not widen inequalities in access to services and/or information.

- The introduction of appropriate technology must be embedded in a process of two-way information exchange and communication.

From the technologist perspective, salient points included:

- The UK itself hasn't yet overcome many of the issues around exploiting data provided by satellite technology and earth observation, and this warrants careful consideration when collaborating with countries with less capacity and experience.

- Funders and practitioners need to think about the business models which safeguard the sustainability and longevity of technological interventions. Greater impact from the £80m could be achieved if this consideration is applied to all projects commissioned.

- Technological interventions may initially miss their M&E targets, but ultimately once scaled up can serve a greater number of beneficiaries than forecast.

- Many public health interventions in developing countries currently rely on data collected and shared by very slow means. Speed and volume of data could be rapidly improved through access to techniques associated with space technology.

- In this field, there is a particular risk of 'white elephants'. At the same time, scientists have to be prepared to innovate and risk failure, even though this is seldom incentivised by research funding structures.

- Thinking about energy needs and provision in the context of the programme will be crucial.

Outcomes and next steps

UKCDS will:

- Keep attendees (and invitees) informed of further developments in this proposed programme and other relevant funding. Please follow UKCDS on Twitter (@ukcds) for news and funding, or visit the UKCDS website (http://www.ukcds.org.uk).

- As recommended by the Technology Strategy Board, circulate details of the TSB's Knowledge Transfer Networks which facilitate research collaboration.

- Circulate details of the SA Catapult.

The meeting was very well received by participants according to event evaluation forms, and there was clear demand for a follow-up meeting to reconvene participants and focus in on the details and scope of the calls with greater clarity.

Some participants suggested multidisciplinary working groups or a sandpit of ideas to focus priorities for the programme. Others suggested an ongoing group to bring the different communities together. UKCDS will consider and consult on how best this might be achieved.

Details of attendees are shown below.

Attendees

First Name	Surname	Organisation
Sam	Alden	SA Catapult
Peter	Atkinson	University of Southampton
Laura	Bocarro	UKSA
Ruth	Boumphrey	UKSA
Alastair	Bovim	Inmarsat
Andrée	Carter	UKCDS
James	Cemmell	Inmarsat
Maria	Cody	UKSA
Simone	Di Vicenz	Christian Aid
Ian	Downey	ECSAT / ESA
Joe	Eisen	Rainforest Foundation UK
Jamie	Enoch	UKCDS
Regis	Garandeau	UCL / CAFOD
Ben	Garside	IIED
Janet	Geddes	Technology Strategy Board
Chris	Hill	GeoData Initiative
Richard	Holdaway	STFC
Gillian	Hosier	Open University
Kaz	Janowski	SciDev
Alan	Knott-Craig	Project Isizwe
Alec	Leggat	Salvation Army, International Department
Chris	Locke	Dalberg
Mike	McCurry	Global eHealth Foundation
Amber	Meikle	Practical Action
David	Ockwell	STEPS Centre
Anna	Peachey	Open University International Development Office
Graham	Peters	Avanti
Kevin	Power	Global eHealth Foundation
Kelly	Shephard	IDS
Hazel	Taylor	Vitol Foundation
Linda	Waldman	IDS
Richard	Wall	Aon Benfield UCL Hazard Research Centre
Kasia	Wisniewska	DMCii