

RAPID KT PLAN UPDATE JULY 2006

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LIST OF ACRONYMS:

KT: Knowledge transfer.

MCCIP : Marine Climate Change Impacts Partnership.

MOC: Meridional overturning circulation.

PI: Principal investigator (of RAPID-funded project).

ROD: Research Output Database – results of annual feedback forms completed by NERC project scientists.

UKCIP: United Kingdom Climate Impacts Programme.

UKCIPnext: Impending ~2008 report by UKCIP on future UK climate scenarios – replacing UKCIP2002.

INTRODUCTION:

This document serves as an update to the initial RAPID KT Plan, outlining KT progress, development and issues arising since December 2005, in addition to summarising KT plans for the near-future (~6 months) to continue the development of our KT programme.

To set the context for this update the objectives of the RAPID Knowledge Transfer programme, as described in the RAPID KT bid in 2004 are summarised beneath.

'1: to transfer knowledge from RAPID science projects to inform policy makers and (potentially) policy decisions (for example, DEFRA, UKCIP)

2: the transfer of scientific findings and developments to users who are seeking to inform policy makers (for example the Hadley Centre)

3: the return transfer of knowledge in terms of policy requirements to shape the work being done in RAPID and optimise its relevance to policy makers

4: the involvement of the broader community (beyond that immediately funded by RAPID) in the process of knowledge transfer.'

The KT Plan Update proceeds as follows: Section 1 summarises progress since the last circulated plan; Section 2 documents some challenges that have arisen in implementing the KT strategy, and Section 3 outlines KT plans for the future.

1. PROGRESS SINCE INITIAL KT PLAN (Dec, 2005):

1.1. Formation of the RAPID user base:

An extensive database of decision and policy makers, with a direct interest/sensitivity to climate change (or environmental) issues has been collated. This includes personnel from within UK-wide government departments, devolved authority departments, government agencies and industry representatives. Consultation with NERC HQ and UKCIP partners was undertaken during the production of this list to ensure that the correct individuals and departments were included.

A current version of the database is appended (attached electronically rapid_users.xls). This database forms the core of email KT ‘alerts’ to our stakeholders, supplementing announcements via stakeholder interfaces – such as UKCIP and NERC HQ eLetters.

1.2. Development of RAPID KT web pages:

A dedicated stakeholder section of the RAPID web site has now been developed. These pages can be viewed at <http://www.noc.soton.ac.uk/rapid/kt/ktstart.php> and presently comprises a news section (updated monthly) and a non-technical science overview (separate, but linked to, the main RAPID Science web pages at <http://www.noc.soton.ac.uk/rapid/rapid.php>).

These stakeholder pages provide the main interface/portal with our users and will develop to include additional material as the RAPID programme and individual projects progress (see Section 3.3).

1.3. Initial KT RAPID P.I. ‘Anchoring’ Meeting:

In March 2006 a KT ‘anchoring’ meeting was held with a number of RAPID P.I.s whose projects have been highlighted as having potential results relevant to our non-technical (i.e. not Hadley centre) stakeholders. Issues discussed included:

- which particular aspects of each project could deliver stakeholder-relevant results
- how realistic was it that these deliverables could be met
- what is the best way to communicate these results.

Richard Westaway (UKCIP) was also able to attend this discussion and provided a valuable outlook from a stakeholder perspective.

It is evident from discussions at this initial meeting, and further email correspondence, that potential obstacles in using some of the programme's results for KT purposes may exist. This is elaborated in Section 2, and feedback/comments/advice from the KT Subgroup on possible solutions would be especially welcome.

1.4. Development of relationship with the Marine Climate Change Impacts Partnership:

RAPID has developed a working relationship with the newly-formed Marine Climate Change Partnership. Chaired by DEFRA, with the MCCIP office based in CEFAS, the partnership will act as the primary focus within the UK for the transfer of high-quality marine climate change information to policy advisors and decision makers. RAPID has a representative on the MCCIP Steering Committee and so can plan and implement the flow of MCCIP-relevant RAPID results into this partnership as appropriate. Central to MCCIP aims is the production of annual science summaries – in the form of 'Report Cards'. RAPID scientists (Stuart Cunningham, Bob Marsh) have provided expert contributions to the inaugural summary (see <http://www.mccip.org.uk> for more information on the MCCIP partnership). RAPID scientist Peter Challenor has also been nominated as an expert reviewer to provide peer review and quality control on MCCIP publications.

1.5. UKCIPnext:

RAPID has developed an active dialogue with UKCIP through high-level RAPID:UKCIP contact, and periodic visits by RAPID personnel to UKCIP HQ providing regular updates to the UKCIP team. Through this dialogue and supplementary developments, such as the appointment of NERC's Director of Science and Innovation, Steven Wilson, to the UKCIP Steering Committee, RAPID is in a good position to assist UKCIP and the Hadley Centre where appropriate with the production of UKCIPnext material related to rapid climate change. The exact nature of this assistance and involvement will become clearer during 2007 through continued discussions between RAPID, UKCIP and the Hadley Centre.

2. ISSUES ARISING IN IMPLEMENTING KT STRATEGY:

Challenges that have arisen in the past months with respect to developing and implementing the RAPID KT strategy and these are documented below. These challenges are not impeding the main thrust of our stakeholder outreach, but our flow of knowledge could be enhanced, and made more efficient, if these points are afforded relevant attention, where possible.

2.1. Access to RAPID project data/results:

Some future KT opportunities may rely upon access to project data via the Rapid data centres at BODC and BADC, particularly with some of the sensitivity modelling projects funded under Rapid. As such, continued encouragement for the efficient and timely archiving of project data, where possible, would be beneficial if we are to make the most of KT opportunities that arise in the future.

2.2. Awareness of 'Individual-scale' KT Activities:

Many project scientists foster individual relationships with the stakeholder community and such relationships are very valuable enabling high-quality KT to occur, complementing programme-wide initiatives. The annual ROD forms provide some information on these interactions, although in some cases it has not been possible to establish the nature of these interactions, despite requests for information from P.I.s. This, in part, is no doubt related to the volume of work/commitments that many of our scientists undertake – but knowledge of individual-scale KT relationships is vital in order to plan an efficient programme-wide KT strategy, that does not replicate the flow of knowledge occurring on an individual basis.

A possible long-term solution to this is to modify the ROD form layout to allow more detailed responses in the appropriate section (see Section 3). However, this will only resolve any problems from the date of the next ROD feedback – March 2007.

3. KT DEVELOPMENT PLAN:

This Section outlines key focus areas for the ongoing development of the RAPID KT programme, building up on the progress made over the last year. The strategy here is designed to enable both the flow of knowledge produced in the near future to occur, but also to develop/consolidate the infrastructure needed to enable the efficient transfer of knowledge in later stages of RAPID.

3.1. Provision of frequent 1-to-1 updates to main stakeholder bodies:

It is important to provide face-to-face updates of RAPID Programme/Science developments with key stakeholder partners – in order to supplement the distribution of information through other sources, such as the RAPID website. It is proposed, then, that visits to key stakeholder organisations namely UKCIP, the Hadley Centre and DEFRA by the KT Manager continue on a periodic basis. Meetings with the MCCIP office will occur biennially as a result of Steering Group commitments, but additional meetings can be scheduled if required.

3.2. Expansion of RAPID User Community (where necessary):

Although we believe contact has been established with the majority of potential RAPID science users, new bridges will be built if necessary, with identified potential users of RAPID science who are not accessible through existing networks. One example of this is the recent instigation of a relationship with NCOF, in order to explore the provision of telemetry data from the RAPID 26N array to supplement initial condition data for operational forecasts.

3.3. Development of Web-page Content:

Having built ‘front-end’ web pages for stakeholders as part of the main RAPID site, this area can now be expanded to include additional information about RAPID projects, results and science. As individual RAPID projects begin to produce results, it is envisaged the stakeholder section of the website will develop to summarise project backgrounds and results under a number of science topics tied to the science objectives outlined in the RAPID Science Plan. For example, separate sections could be developed to cover paleo results, recent observations, probability of future change, atmospheric response to ocean changes... etc.

3.4. Further our understanding of stakeholder requirements:

A good fundamental understanding of the key areas of stakeholder interest in RAPID science has been established through a number of one-to-one meetings with users. For example, industry representatives and local authorities have expressed particular interest in:

- probabilistic forecasts of future MOC changes
- the nature of atmospheric responses (notably storm track and precipitation) to MOC changes,

whilst other stakeholder bodies have expressed interest in:

- probabilistic forecasts of future MOC changes
- associated SST/SAT changes within the UK sector.

One way to further this understanding and to elicit information from those stakeholders it is not possible to visit, is to circulate stakeholder questionnaires - providing an opportunity for users to explicitly register an interest in components of RAPID science. This technique has been used successfully by the QUEST Science-Policy team in Bristol and would also be a useful tool with which also to gauge stakeholder interest in a dedicated RAPID KT-Workshop (see below).

3.5. Hosting of RAPID KT Workshop:

Subject to stakeholder feedback, a RAPID KT Workshop is proposed for early 2007. Elements of the RAPID science community would be invited to provide overviews of their projects (as they stand at the time of the workshop, but also covering future plans) whilst discussion and feedback sessions will allow a further opportunity for RAPID stakeholders to express interest in particular topics, and discuss in what format results could best be delivered. The exact format and content of the proposed workshop will be summarised in a separate document, circulated to the KT Subgroup at a later stage for comment, but ideas/suggestions for the workshop would be welcome at this stage.

The impetus for this workshop will draw upon the panel discussion ‘What does society want to know about rapid climate change?’ to be held at the 2006 International RAPID Science Conference. It is envisaged that a small number of RAPID stakeholders (in addition to the panel members) will attend this event – even though it is publicised as a science-orientated, rather than a stakeholder-orientated event.

The focus of the proposed KT workshop would, again, be on more non-technical results, rather than topics such as climate model development and data synthesis. Additional workshops with the transfer of *technical* knowledge to institutions such as Hadley Centre will be explored at a later stage – and it is likely that further KT workshops will be co-ordinated towards the end of RAPID to tie in with any finale event.

3.6. Provision of recommendations for KT Facilitation in future Programmes:

Although only part-way through the present RAPID programme, it is possible to begin to consider how KT facilitation might be enhanced within future NERC directed programmes. Some immediate recommendations could relate to the structure of ROD forms (see Section 2.2) and possible modifications to the wording of grant-acceptance letters relating to access of project results and data.

The Tyndall Centre have also highlighted the benefits of a more ‘interactive’ process of programme science communication – which, to reap the maximum benefits, would ideally commence with stakeholder consultation at the earliest practical stage (i.e. before

the exact nature of the funded science has been agreed), so that the actual funded science is tailored to some extent by policy/societal needs (too late to implement this for RAPID).

Possibilities in implementing these changes can be explored through discussion with the KT and Science-Policy team at NERC HQ, who can provide guidance on what may or may not be achievable, and how to implement changes with respect to forthcoming directed programmes.