## IMS Team: Funding and three-year work plan 2012-14

14 July 2011

Peter C. Gøtzsche, Director, Nordic Cochrane Centre (funding), and

Rasmus Moustgaard, acting IMS Director (3-year plan)

## Executive summary

In Split in March 2011, the Steering Group agreed to regard the IMS Team as core infrastructure. This requires a funding overview and a 3-year work plan to be approved by the Steering Group.

## Purpose

To get approval for the funding and the 3-year work plan for the Nordic IMS Team 2012-14.

## Urgency

High. A decision is requested at the Madrid meeting.

## Access

Open.

## Background

At its meeting in Split, the Steering Group agreed to regard the IMS Team as core infrastructure critical to the Collaboration; supported a move to programmatic funding using a similar framework to other ‘core’ infrastructures (e.g. the Cochrane Editorial Unit); and supported the attendance of the IMS Director at future Steering Group meetings for appropriate agenda items.

The Steering Group also agreed to remain with the current level of funding until the 11% increase from 2010 to 2012, which was requested in Split, could be justified.

Finally, the Steering Group suggested, but did not come to an agreement about it, that the IMS Director role might be extended to involving oversight and co-ordination of all Cochrane IT activities, developed in partnership with the leadership team, and be a central appointment that would require significant management functions.

The departure of IMS Director Monica Kjeldstrøm on 1 Feb 2011 after 18 years in the Collaboration prompted us to review our management and funding arrangements for the IMS Team and for the Nordic Cochrane Centre. We had wished for a long time to upgrade our research activities, which have been instrumental not only for obtaining core funding from the Danish government, but also for preventing a cut in funding, which the rest of the Danish health care system has experienced. Apart from doing basic methodological research of relevance for the Collaboration, we have taken great care also to perform research that is highly relevant for our funder, the government. As an example, we are currently doing systematic reviews on regular health checks, which is a politically very hot issue in Denmark.

To allow us to strengthen our research activities, we planned to combine two IMS posts, those of the Director and the Senior Developer, Rasmus Moustgaard, in one post. To make this possible, we assigned a 0.5 FTE Administrator as an aide to the IMS Director and also planned to let the Director of the centre rather than the IMS Director handle human resources issues related to the IMS staff. However, in Split the Steering Group expressed concerns about this arrangement.

We have realised that it was too optimistic to combine two important posts in one and have now revised our proposal, adding a 0.5 FTE person who needs not necessarily be titled IMS Director as it could also be an IMS Co-ordinator. We believe this is feasible because:

1) Peter Gøtzsche will be responsible for human resources issues related to the IMS staff that were previously dealt with by Monica Kjeldstrøm;

2) The addition of a 0.5 FTE Administrator will strengthen the leadership of the IMS team and the overall IMS co-ordinating duties for the 0.5 FTE IMS Director/Co-ordinator;

3) Rasmus Moustgaard will continue in his job as Senior Developer. This has always involved a leadership role for the Nordic IMS team in relation to technical issues, whereas the IMS Director/ Co-ordinator will continue to be responsible for strategic decisions, as before, in collaboration with Rasmus Moustgaard and Peter Gøtzsche.

4) The responsibility for managing and supervising the IMS support team (currently four people, located in different countries) could be transferred to another unit. Monica Kjeldstrøm was responsible for this, but it has been suggested that the Editorial Unit undertook the task.

In the budget we presented in Split, there wasn’t room for a 0.5 FTE IMS Director/Co-ordinator. We therefore proposed not to extend the post for our Documentation and Test Officer, which runs out at 31 December 2011, and to assign these functions to other staff. However, in the meantime, we have acquired more funding that allows us to fund this post from our budget, at least till 31 December 2012, but very likely for the whole period 2012-14.

This means that we continue with the same number of FTEs as in 2010, the only difference being that a 0.5 FTE Administrator has been added and a 0.5 FTE IMS Director/Co-ordinator subtracted. The appointment of the 0.5 FTE IMS Director/Co-ordinator will take place with the involvement of the Collaboration, e.g. co-chair of the Steering Group Jeremy Grimshaw and Editor-in-Chief David Tovey.

Our intention is the same as always, to continue to provide substantial support to Cochrane IT activities through our support to the IMS Team, although we believe that core infrastructures should be fully funded by the Collaboration, as is the case for the Secretariat and the Editorial Unit.

## Work plan 2012-14

The work plan below should be seen as a general outline. The IMS team will prioritise its resources on a running basis in close collaboration with the Editorial Unit and the new IT committees in order to provide the maximum benefit for the allocated resources.

## Proposal

We propose that the Steering Group approves our work plan and budget. The Nordic Cochrane Centre is willing to cover the salary of an 0.5 FTE IMS Administrator and the Documentation and Test Officer (at least till 31 December 2012), the infrastructure costs for the IMS team, the cost for the IMS servers and expenses related to travel, training and sundries (see below). Our proposal involves an annual 3.3% increase in the Steering Group budget from 2010 (DKK 2,577,795) to 2012 (DKK 2,750,000), which corresponds to the level of the inflation in Denmark that was close to 3% by the end of 2010. This planned increase in budget is in DKK, not in £, as the value of the pound is unstable.

## Summary of recommendations

See Proposal.

## Resource implications

See below.

## Impact statement

See above.

## Budget proposal for IMS Team funding for 2012

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| For convenience, we also show the expenses in £, as per the current exchange rate (DKK 100 = £11.85). This is therefore NOT our proposed budget: |  |  |  |
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Cochrane IMS Team work plan 2012 – 2014

# Introduction

The main objective of the IMS Team is to give the Collaboration’s many contributors the best possible software tools to help them do their jobs efficiently. We have reached a number of important goals in the years 2009 – 2011. However, this work was not explicitly governed by a Cochrane IT strategy, but was based on per-project funding applications to the Steering Group.

This funding model left little room for modifying the work plan in response to the changing needs and priorities of the Collaboration, and we therefore welcome recent developments: The Collaboration is currently developing an IT strategy and has updated the formal structure of its IT committees (ISSC, ISOC, RAC, ADAC, etc.). Furthermore, the IMS Team is now recognised and funded as a core Cochrane resource, which means we are no longer required to apply for funding on a per-project basis.

All major projects should be focussed on implementing the Cochrane IT strategy, and to accomplish this, each project should, ideally, be endorsed and overseen by one or more of the established IT committees with the ISSC as the executive committee. The IMS Team expects to be represented on each committee in appropriate roles. To gain more outside inspiration, we would welcome more project proposals that originate from outside the IMS Team, but because of the limited resources available to the IT committees, we realise that most of the work detailing the proposals will probably still have to be done by the IMS Team in collaboration with the Cochrane Editorial Unit.

Our resources are directed partly towards operation, maintenance and support, and partly towards new developments. As a rule of thumb, the development capacity has been divided equally between RevMan and Archie work. This corresponds roughly to one FTE programmer for each type of work, but more than two people are involved in this, as, for example, the software needs to be planned, tested, documented and rolled out. Any surplus capacity, e.g. during breaks in major project work, is being used for implementation of minor but important changes that are submitted by users through the 'wish list' system. However, despite this effort, the wish lists generally grow over time rather than becoming shorter. We would therefore like to dedicate more time to this work, but this would require more resources.

We are aware that we can expand the capacity of the IMS Team by applying for additional funding on a per-project basis, but we prefer to use this option only under exceptional circumstances. The work and challenge involved in hiring new highly-qualified staff for a limited period of time and introducing them to Cochrane and the IMS is considerable and not very cost-effective. The IMS Team is flexible with respect to postponing ongoing work and changing focus as priorities change, which seems a better option than on/off employment of staff.

Because of the current uncertainties regarding the details of the IT strategy that we are going to implement, and because we have experienced that priorities and IT projects change over time, even in the short term, we have not provided a detailed work plan at this stage for the next three years with milestones and timeline in place. Instead, we present below an outline of projects, divided into RevMan and Archie, that we think are most likely to be implemented. This outline has been assembled from a number of sources including the draft IT strategy document prepared by David Tovey on behalf of the ISSC.

# Projects likely to be implemented in 2012 - 2014

## RevMan projects

We plan to release at least two major versions of RevMan. We will also release bug-fix updates as required, which generally takes precedence over new development work.

The latest major version of RevMan, 5.1, did not introduce any major new fields or sections in reviews, but in order to implement many of the important suggestions on the wish list, the next version(s) will introduce structural changes. This means that it will be mandatory for anyone preparing a new review version for publication to upgrade.

Changing the format of intervention reviews is a major undertaking that has to be planned well in advance. Because some of the pending changes only affect DTA reviews and therefore impact on fewer people, and because the DTA review format has had less time to mature and requires updating more urgently, the RAC has advised that RevMan 6 should focus on DTA reviews (and Overviews of reviews) and not change the structure for other review types. RevMan 6 will, however, also introduce new functionality that does not change the review format. RevMan 7 will introduce changes to all review types and more improvements on the functionality.

### RevMan 6

Work on RevMan 6 is likely to begin in the last quarter of 2011 with a release date in the first half of 2012. The exact timeline depends on the number and nature of the improvements that are scheduled for the release (by the RAC). These may include:

* Changes to DTA reviews including more control over SROC plot presentation
* Changes to Overviews of reviews including Summary of Findings tables and the ability to having more than one reference per included review
* Searching for, and downloading of, study records from the Cochrane Register of Studies (CRS)
* Improved integration with other software, e.g. study appraisal and selection tools (like RevBase) or analysis packages
* Preview of the published PDF version, as it will look in The Cochrane Library
* Improvements to the study data calculator
* Improved validation with more validation checks
* Interactive training modules
* Licence management system (to increase income from selling RevMan)
* Other items from the wish list (it currently contains 140 items)

### RevMan 7

Work on RevMan 7 will begin after the release of RevMan 6. The development time will probably be around one year. With the exception that we know it will introduce structural changes to reviews, nothing conclusive has been decided about the list of improvements, which may include:

* Structural changes affecting all review types, e.g. URL field in references
* Changes to intervention reviews, in particular to the Risk of Bias and Data and Analyses sections
* Novel forms of methods and analyses
* Structured titles and comparisons
* Indirect comparisons graphs for Overviews of reviews
* Support for new types of reviews and/or summaries of reviews
* Support for additional content for delivery to The Cochrane Library, e.g. generic protocols, translations of summary and abstract
* Improved change tracking
* New review file format that supports file attachments
* Any postponed items from the RevMan 6 list (see above)

### Online vs. offline

The ability to edit reviews in a browser without the need to install a separate client application (i.e. RevMan) is one of the features most asked for. The primary objective is availability in more locations (e.g. computers where you are not allowed to install RevMan) and on more types of devices (e.g. tablet PCs).

Pilot work has begun in 2011 with the implementation of a tool to edit the main text of a review (excluding references and data and analyses, for instance). The experience gained from this project will help guide the future development of RevMan, and online editing is likely to end up being the preferred option in the foreseeable future.

Concurrent editing as known from, for instance, Google Docs is an advanced form of online editing that could also be pursued. We expect it would be of great value for authors working on the same review and for people providing support to authors.

## Archie projects

We plan to release an updated version of Archie 3 to 4 times every year. Each update will, typically, contain 10-20 new features (a few of which are major) and some bug fixes. Archie 3.5, for instance, included the electronic Licence for Publication forms as the main feature, but also 10 other new features and 11 bug fixes.

The exact composition of each update is to be decided in collaboration with the ADAC and other relevant committees. Here are some of the projects that we are likely to work on within the next three years:

* Feedback management and tracking
* Monitoring forms for non-CRGs
* Tools for authors, including personalised views, working folders and communication tools
* Preview of the published PDF version of a review, as it will look in The Cochrane Library
* Monitoring reports based on data from the workflow system
* Notifications to relevant stakeholders when reviews are updated
* Replacement of CRG modules with data feeds from Archie to cochrane.org and entity web sites
* Delivery of additional content to The Cochrane Library, e.g. translations of summary and abstract, and perhaps Conflict of Interest forms
* Tools for improving performance of updating reviews, e.g. to automatically notify authors of new studies relevant to their reviews (based on CRS web service)
* Upgrades to the technical platform that Archie is built upon (both hardware and software)
* Other items from the wish list (it currently contains 250 items)

## Other projects

The IMS Team would welcome the opportunity to become involved in other projects that are not direct extensions to RevMan or Archie, but involve some kind of interaction with the IMS.

One example would be to develop applications for presenting Cochrane reviews on mobile devices (smartphones, tablet PCs, etc.). The data feed for such applications could come directly from Archie (without going through the Cochrane Library) and could, if desired, be available as soon as the review was marked for publication by the CRG (publication when ready).