



Using the five keys to improving research costing in low- and middle-income countries

A resource pack for trainers

Supplementing the ESSENCE good practice document

For further information about this document and the ESSENCE initiative, please contact the ESSENCE Secretariat Coordinator, Dr Garry Aslanyan at aslanyang@who.int

Compiled by Research Africa

Editing: Mary Ralphs

Design and layout: Tracey Watson

Film production: Go Trolley Films



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PREFACE

ESSENCE on Health Research is an initiative by funding agencies to improve the coordination and harmonization of research capacity investments. Recognizing the particular complexities involved in health related research, ESSENCE members embrace the principles of donor harmonization and country alignment expressed in the 2005 Paris Declaration on Aid Effectiveness and in the 2008 Accra Agenda for Action. Following these principles, we try to align our work with the priorities of the countries in which we work, and aim to harmonize our activities and procedures, to facilitate complementarity among ourselves and to reduce the administrative loads on funding recipients.

The ESSENCE Secretariat is hosted at the Special Programme for Research and Training in Tropical Diseases (TDR) at the World Health Organization. In 2012, we published the *Five Keys To Improving Research Costing In Low-And Middle Income Countries* in our series of Good Practice Documents. Since then, the *Five Keys* have been presented to audiences in many parts of the world. In this process, it has become clear that supplementary training materials would enable us to share the message of the *Five Keys* more widely. To address this, ESSENCE supported the production of this *Resource Pack for Trainers*. It is our hope that these resources will further empower research practitioners to build strong foundations of knowledge and practice in the area of research management.

But what are some of the contextual demands to which this set of training materials responds? There are at least two dimensions. On the one hand, international funding agencies, including the ESSENCE members, have found that, to ensure the sustainability of many of the research institutions they support, research costing requires strengthening. On the other hand, as these research institutions boost their competitiveness, and are able to accept higher levels of funding, their need for clear policies and guidelines on research costing has grown. Although funders and research institutions may sometimes find it difficult to agree on what topics or lines of enquiry should be funded, research costing is an area in which collaboration is not only possible, but of benefit to everyone.

This Resource Pack is designed to support training related to research costing, and can be used to assist trainers to deliver short presentations as well as more in-depth workshops. The Pack supplements the *Five Keys* document by providing additional examples and activities to guide trainees through various processes that will help them to grapple with and grasp the concepts. We're aiming to help research practitioners, from heads of faculties to new entrants to the research or finance office, to acquire new insights and skills, as well as to equip colleagues who already have experience in this field with the resources they need to teach others.

ABOUT THIS RESOURCE PACK

Why it was developed

This facilitator's guide and the resources that go with it, was developed to support finance managers and research managers from low- and middle-income countries to conduct effective interactive training on research costing. Accurate research costing is critical for researchers, research administrators, and financial controllers. Why? Because the success and sustainability of research relies on adequate financial resources being available to support both the research projects and the research institutions within which the projects are conducted. It is essential that researchers and research managers, as well as the relevant management and administrative staff, develop an excellent understanding of what research costing entails, and why it is necessary for research costs to be accurately calculated.

In 2012, a consortium of funding agencies, ESSENCE on Health Research published *Five Keys to Improving Research Costing in Low- and Middle-Income Countries*. The document was favorably received by research institutions worldwide, and has since been endorsed by a number of the key research funders as a useful tool for extending awareness of the trends and tensions related to research costing. After running some initial training courses based on the *Five Keys* document in several countries, ESSENCE realized that, to extend this training, a resource pack would help research and/or finance managers working within research institutions to run similar training courses for their own staff. The pack draws on the presentations developed by the trainers involved in the initial training courses, as well as on the skills and insights of a number of other experienced research managers and finance managers from research institutions and funding organisations.

Who it is for

While we have assumed that trainers who use this pack will be fairly familiar with the processes involved in both research and research costing, this Resource Pack has been designed for practitioners who are not financial experts. More specifically, the training targets research leaders (principal investigators), novice and emerging researchers, research administrators, innovation managers, as well as coordinators of research projects. In addition, we hope that finance practitioners – project accountants, controllers, or financial officers – in research institutions will find these materials useful for training new staff or novice researchers in good practices related to research costing.

What is included

Apart from this Trainer's Guide, the following resources are included in this pack:

- The original *Five Keys* document.
- A set of short video interviews.
- A set of three slide presentations that you can adapt or modify depending on how long your training sessions are; the presentations included cover: a one-hour presentation (suitable for a session at a conference or a lunch-hour discussion), a three-hour seminar, and a three-day workshop.
- A set of Course Notes for participants attending the longer events (that is, three-hour or three-day training), which you can copy and print out.

When training is useful

The old proverb, ‘you can take a horse to water but you can’t make it drink’ applies in any training context. The key is to target people who want training, or at least acknowledge that they want to learn more. A number of indicators suggest a state of readiness for training; for example:

- Researchers frequently approach management or research leaders with queries about indirect-cost rates, or to complain about funders’ approaches to office costs or overheads;
- Different faculties, departments or senior academics apply their own bespoke approaches to budgeting for research projects creating inconsistency across the institution;

- Researchers and institutional managers are uncertain about how portions of grants that cover indirect costs are allocated to departments in their institution.
- Those preparing proposals for large funding projects feel anxious about how to budget for, and recover, indirect or overhead costs.

Even if your institution has an effective and streamlined approach to research costing, new staff have to be made aware of policies and processes, and helped to understand how such policies help to ensure the sustainability of the organization. The Table below sets out three scenarios that typically exist in research institutions, and may help you to tailor your training appropriately within your institution or network.

Situation	Intervention	Situation
High levels of uncertainty and confusion about research costing, and much fragmentation in policy and practice.	A series of awareness-raising presentations, seminars, and longer workshops with key stakeholders in the research management system which may lead to a policy-formulating process for the institution.	Greater awareness of the need for accurate research costing, and the adoption of institutional policies and practices related to this.
A research-costing policy exists, but some staff are confused about how to apply it, and practices across the institution are inconsistent.	Presentations, seminars, and in-depth workshops could be used to offer different levels of staff opportunities to learn about or refine the policy and its implementation.	The research-costing policy is better understood; cost-recovery practices are standardized across the institution.
All institutional stakeholders understand research costing, including how to apply the institution’s indirect-cost rate, and how funding is apportioned when grant payments are received.	All newcomers to the institution receive training to ensure they are informed about institution’s policy on research costing, and how to apply it.	Research budgets are accurate and cost-recovery processes are refined; all stakeholders are able to contribute to institutional sustainability.

BEFORE YOU START TRAINING

In this section we describe the skills, equipment, and training materials you will need to familiarize yourself with before you begin planning your training program.

Ensure you have the skills and equipment you need

This Resource Pack was developed to support trainers as much as possible, and was designed mainly for facilitators who have the following knowledge and skills:

- A sense of the relevant research institution or network's priorities and business processes.
- A basic awareness of research processes, and of what motivates researchers.
- A good knowledge of research costing, including: how direct and indirect costs are defined; the difference between costing and pricing a research project; how to calculate an indirect-cost recovery rate using an institution's audited financial statements. This knowledge can be acquired partially by studying the *Five Keys* document, and other materials in the Resource Pack, but ideally you will be able to draw on your own experience of research costing as well.
- Good interpersonal skills, including an ability to adapt your use of language, and the pace of your program, to the needs of trainees.
- Experience of facilitating training events, and an ability to communicate technical, and budgetary information in an interesting way, including using printed and audiovisual media.
- The ability to organize the practical aspects of the program such as an appropriate venue and catering, power sources, overhead projectors, etc.
- An openness to evaluating your training, receiving feedback from participants, and improving your training processes.

Equipment you may need:

- A computer or laptop with Microsoft PowerPoint (version 2003, 2007 or 2010).

- A projector (with speakers if you plan to show the videos).
- Marker pens and a flipchart.
- Name badges or stickers (if appropriate).
- A copy of the Course Notes for each participant.
- A couple of calculators in case participants forget to bring their own.
- A can of baked beans or some similar cheap but locally manufactured item that you can use to give out as joke prize during the training session.


Note also that one of the exercises in the three-day workshop is based on an audited balance statement as reported in a recent annual report issued by the research institution/s represented at the training, so it will be necessary for you to obtain access to this.

Familiarize yourself with the elements of this resource pack

To begin with, it is vital that you familiarize yourself with what is covered in different elements of this resource pack, so that you can decide which tools and materials will work best in your own context.

The Five Keys

The *Five Keys to Improving Research Costing in Low- and Middle-Income Countries* is the cornerstone of this resource pack, and trainers are encouraged to read the document to get to know it thoroughly. If you are planning to run a longish training session (such as the three-hour or three-day programs included in this guide), send copies to participants at least a week before the training event. The *Five Keys* can be downloaded from www.who.int/tdr/publications/five_keys/.

 Read the *Five Keys* document and consider which aspects are most relevant to your trainees

Three course outlines

This guide contains course outlines and facilitation notes for three training sessions of different lengths. The course outlines will help you decide how to structure your training program depending on how much time you have. The information provided will equip you to:

- Liaise with a cohort of participants.
- Plan and prepare for each session, including the specific content to be covered in each session, as well as activities to help keep participants interested and involved in their own learning.
- Evaluate your training.

It is important to note that the course outlines include some optional or suggested activities. It is up to you to choose the ones that are most appropriate to your aims, and will work best in the time you have available.

While planning your program, remember to *allow time for discussion and questions*.

 Review the three course outlines and decide which elements will work best for you

Three slide presentations

Three slide presentations are linked to each of the three course outlines. These are provided as MS PowerPoint files (.ppt). You can select the slides you want to use, change the order or adapt the contents of the slides where necessary to suit your specific situation.

If you view the slides so that the 'Notes page' is visible, you will see that the slide presentations include points you can highlight as each slide is shown.

Remember not to simply read what is on each slide, rather use your own words and the notes provided for each slide. This will make the presentation more fluent and meaningful for your audience. Imagine you are speaking to people you know. Interact with them, and be aware of their energy levels. Stop if you see people's heads sagging or nodding, this means they are getting lost or bored. Check in to find out what the problem is, and either pick up the pace or explain more carefully.

 Review the three slide presentations and the notes provided for each slide

Short videos

Six short video clips have been created to support and reinforce the messages that you will be trying to convey in the training sessions. Each video includes extracts from an interview with a research-costing expert. Each expert draws on their own practical experience to explain and illustrate different aspects of the *Five Keys*. Be sure to view each video in full before running a training session so that you

are familiar with what is covered. The table on the next page provides a summary of what is covered in the different videos. Use this information to help you work out which clip/s will be best suited to your needs. The course outlines also contain suggestions for when to show each clip. Remember to arrange for the appropriate sound amplification if you plan to show the videos to a large group.

 View the videos and check their contents against the issues listed in the table on the next page

Video No.	Speaker/s	Relevant Key	Main issues addressed
1 (9 mins)	Dr. Garry Aslanyan, Coordinator, ESSENCE on Health Research initiative, Special Programme for Research and Training in Tropical Diseases, TDR, World Health Organization, Switzerland	ALL	<ul style="list-style-type: none"> Why research costing is important to funders The challenges of research costing in low- and middle-income countries How funders and research institutions are changing the way they think about research costing The importance of research professionals being aware of the concepts contained in the <i>Five Keys</i> Where to find more information
2 (12 mins)	Dr Robin Drennan, Director, Research Development, University of Witwatersrand, South Africa	K1 & K2	<ul style="list-style-type: none"> Why accurate research costing is important for sustainable research institutions Why the budget is a critical part of a research-project proposal The building blocks of a good project budget The difference between direct and indirect costs How an indirect-cost rate is applied to a research project budget
3 (13 mins)	Pieter du Plessis, Director of Finance, University of Free State, South Africa	K2	<ul style="list-style-type: none"> Why accurate research costing is important How one university developed its approach to recovering indirect-costs How one university calculates its indirect-cost rate The difference between research costing and research pricing One approach to full cost recovery
4 (13 mins)	Dr Jose Jackson-Malete, Deputy Director of Research, University of Botswana, Botswana	K2, K3, K4	<ul style="list-style-type: none"> How the University of Botswana encourages researchers to submit new grant applications When the university recognized research costing as a policy issue How the university defines direct and indirect costs What the university does with the revenue it recovers from research projects for indirect costs How research grants are managed, and the challenges involved Who sets the guidelines, policies and procedures for grant management
5 (9 mins)	Karen Noble, Immunology and Infectious Disease and Technology Transfer Team Manager, and Caitlin Cook, Populations and Public Health Team Manager, Wellcome Trust, UK	K5	<ul style="list-style-type: none"> What the Wellcome Trust is Why the <i>Five Keys</i> document is important to funders, and to the research institutions they support The Wellcome Trust's approach to the funding of overheads or indirect costs How research institutions can communicate with funding agencies if there are differing approaches to the funding or recovery of indirect costs
6 (11 mins)	Nicole Généreux, Senior Partnership Officer, International Development Research Centre, Canada	K5	<ul style="list-style-type: none"> What the International Development Research Centre is Why the <i>Five Keys</i> document is important to funders, and the research institutions they support The International Development Research Centre's approach to the funding of overheads or indirect costs Key tips for developing a project budget How research institutions can bridge the gap with funding agencies if there are differing approaches to the funding or recovery of indirect costs

Course Notes for participants

The Course Notes are designed for trainees who attend the longer training courses (that is, the three-hour or three-day workshops). The Course Notes include:

- A short introduction about ESSENCE and the *Five Keys* document.
- A summary of each video presentation.
- Selected slides that cover the main points of the training, with space for participants to add their own comments.
- Notes for two role-plays.
- A quick quiz that participants can use to test their general understanding of the five keys.
- A set of four practical examples that require trainees to use the calculations involved in research costing. The same examples are included at the end of this guide for your own use.
- Appendices that contain answers to the quiz and show the calculations used in the four examples.

 Review the Participant's Notes, and print out copies as required

Evaluation tools and tips

Evaluation is a critical component of professional training and development. Where carried out effectively, an evaluation offers participants an opportunity to reflect on *what* they have learned as well as *how*, and *how well*, they have learned. Equally, evaluation processes offer facilitators insight into where their training interventions succeeded or may require further development.

Measuring learning progress against learning goals is an important way of testing the potency of the overall training experience – for both facilitator and participant. For this reason, the three course outlines provided include a statement of learning goals at the outset, opportunities for participants to check how they are doing against these goals as the


training proceeds, and to evaluate their progress at the end of the training session.

Encourage participants to feel comfortable about providing honest and open feedback by providing them with the option to complete their form anonymously. If you have time, you can ask participants to complete the forms manually at the end of the course. If time runs out, you can send them the form by email or use an online facility such as Survey Monkey. When you get responses back, capture the results in a spreadsheet. This will allow you to analyze the responses, and create a quick snapshot of what participants thought of the training.

If taken seriously by trainers, evaluations can provide a litmus test for determining whether further training with a particular cohort is necessary, and help to strengthen your skills for future training sessions.

A sample evaluation template is included on the next page. If you prefer to design your own form, be sure to ask participants about both the training *plan* and the training *process*, using questions such as those shown below (as adapted from a World Health Organization document entitled *Traditional Practitioners as Primary Health Care Workers* published in 1995):

- Were the aims of the training session (learning goals) clearly stated?
- Did all participants know what the aims were and understand them?
- Was the content of the session and the training material aligned to the learning goals?
- Was the material presented clearly?
- Was there enough time for questions and discussion?
- Were the examples used appropriately to clarify important points?
- What did participants like and dislike about the training?
- What suggestions do participants have to improve the training?

 Review the evaluation template on the next page, and print a copy for each participant

Evaluation form					
DATE OF TRAINING					
FACILITATOR					
LOCATION OF TRAINING					
Please indicate your level of agreement with the ten statements listed below by placing a tick in the spaces of your choice. Then answer the questions below.					
	Strongly agree	Agree	Neutral	Disagree	Strongly disagree
1. The goals of the training were clearly defined					
2. Participation and interaction were encouraged.					
3. The topics were relevant to me.					
4. The content was organised and easy to follow.					
5. The materials distributed were helpful.					
6. The training will be useful in my work.					
7. The trainer was knowledgeable about the topics covered.					
8. The trainer was well prepared.					
9. The training goals were met.					
10. The time allotted to the training was sufficient.					
What did you enjoy most about this training?					
What aspects of the training could be improved?					
Will this training be useful in your current role, and if so, how?					
Do you have any other comments you would like to share?					
Thank you for your participation and your feedback!					

Source: This form was adapted from the online training evaluation form accessed at <http://www.cal.org/caelanetwork/profdev/states/iowa/training-evaluation.pdf>

Tailor your training to your audience

Each cohort of training participants is different. If you are running a longer training session (more than an hour or two) it is a good idea to try and find out a bit about your trainees. One way to do this is to set up a registration process for the workshop that allows you to interact with participants by email or a closed Facebook group. Then ask participants to send you their responses to a set of questions such as those set out below to give you a sense of each participant's experiences and needs *before* you run the workshop:

- What are the two main challenges you face in relation to research budgets?
- Do you understand concepts such as direct and indirect costs, full costing, and indirect-cost rates?
- Does your institution have a policy on, or a standard approach to, research costing?
- Do you perceive a gap between your institution's policies and practices, and funder requirements, and if so, how have you attempted to manage this?

Where feasible, try to adjust and modify the training to suit your audience. Some participants may have extensive experience of research-project budgeting and reporting, and others will have little awareness of the importance of accurate costings. Try to be conscious of disparities in participants' knowledge and experience, and use this to their advantage in training situations. For example, you can allow more experienced practitioners to share their knowledge, and encourage the less experienced ones to express their concerns, and discuss the challenges they face. Reassure less experienced participants that everyone finds these issues confusing at first, and that by raising their questions in the group, they will help everyone to consolidate their knowledge.

If you are running a relatively long training session (more than two hours), it is especially important that participants use the space to share their own questions and experiences in ways that are relevant for them and the rest of the group. One way to do this is to work with some of the participants to prepare short case studies on actual situations they have had to deal with.

Time management and facilitating group discussions

Time management during the training sessions is vital and is the responsibility of the presenter. Duration guidelines are given in the course outlines, but you will need to rehearse the slide presentations and time yourself so that you know you can cover all the important points in the time allocated. You also need to accurately estimate the time required for other activities you include.

The time you take will also be affected by the amount of audience participation you have. Make it clear to trainees that you encourage questions of clarification at any point (that is, they should stop you if they don't understand what you mean by a particular term or concept), but that you would prefer other ideas and questions for discussion to come up in the time allocated for this.

You also need to manage the discussion. Ensure that participants have an equal opportunity to contribute, and step in if anyone starts to dominate the discussion. If one person starts a dialogue with you, cut this short by asking if anyone else has questions. Another option is to say, 'Let's continue this discussion at tea time' or 'Let's come back to this later'.

A note about online training

It is entirely possible for you to train participants in different regions or even different countries via the internet. A plethora of online tools exist to facilitate interactive online training, including for instance, Go To Training (see <http://www.citrix.co.za/products/gototraining/overview.html>), and the materials in this Resource Pack could be adapted for this. Before taking this route, however, remember to ensure that the technology and software available to you and your trainees is adequate to support training over a sustained length of time.

A quick checklist for trainers

I have:

- ✓ Read the *Five Keys*.
- ✓ Perused the Course Notes.
- ✓ Worked through the PowerPoint slides, including the notes.
- ✓ Understood how the results of the financial calculations are arrived at.
- ✓ Watched the videos.

Now you are ready to begin the process of preparing your training intervention. Good luck!



OPTION 1: COURSE OUTLINE FOR A THREE-DAY WORKSHOP

Summary and learning goals

The three-day workshop is designed to respond to a need for *in-depth* training on research costing within different institutional contexts.

This workshop is designed for between 5 and 15 participants, who will be given opportunities to:

- Develop a *thorough understanding* of the contents of the *Five Keys* document, including the case studies provided with each Key.
- Discuss how the *Five Keys* apply to their institutions, projects, or research networks.
- Work through practical examples of research costing provided, and some that are drawn from their own institutions.

The workshop is divided into three parts.

- **Day 1** is for introducing the facilitator, the participants, the process, and the *Five Keys* document, as well as focusing on:
 - Key 1 (defining and categorizing indirect costs) and
 - Key 2 (determining indirect cost rates).
- **Day 2** is for focusing on:
 - Key 3 (institutional management of research grants),
 - Key 4 (developing relevant skills and competencies), and
 - Key 5 (bridging the gap between funders and research institutions).
- **Day 3** is for working through practical examples provided in the Course Notes, as well as examples from participants' own projects or institutions.

Preparation

A three-day workshop requires a significant investment of time from the facilitator and the participants. This form of training should therefore be planned well in advance to allow for the necessary preparation to be undertaken.

As a general rule of thumb, it is advisable to allow half a day of preparation for every day of training. So, for a three-day training workshop, you should expect to spend at least one-and-a-half days preparing your program and ensuring that you have all the information and equipment, etc. that you will need. You may also require some logistical support in order to be able to carry out the training within your institution.

For facilitators, important aspects of preparation include:

- Identifying of a cohort of participants, and informing them about the training program and encouraging them to prepare for the workshop. A draft message has been included on the next page that you use as the basis of an email to participants about this.
- Re-reading or reviewing the *Five Keys* good practice document in the light of needs expressed by the participants.
- Reviewing the relevant aspects of the suite of training materials in this resource pack.
- Reviewing each session of the three-day program and choosing from among the suggested activities to make sure you know what to do.
- Rehearsing the slide presentations and reviewing the points that are visible in 'Notes view' to check how long you need for each set of slides you use.
- Thinking about likely questions that might come up and preparing some model answers. Remember: if questions are asked that you don't have answers for, it is perfectly acceptable to admit that you don't have an answer. Tell the group that you will try to find out, and give them a response later in the course or by email.
- Organizing a venue, equipment, handouts, and catering.

Draft message that you can adapt and email to participants

Send
 Chat
 Attach
 Address
 Fonts
 Colors
 Save As Draft

Photo Browser
 Show Stationery

New Message

To:

Subject: The upcoming workshop on research costing

From:

Signature: None

Dear Participant

Thank you for your interest in the upcoming course on research costing. The course will be held from *[insert dates and times]* at *[insert venue]*. Refreshments will be served.

The course outline is attached (see below). To ensure that you get the most from the training, you are strongly encouraged to prepare for the workshop by reading the attached *Five Keys* document *[attach pdf file]*. Please give yourself enough time to grasp the concepts behind each of the Five Keys.

To help me to tailor the workshop to your specific needs, it would be useful if you could send me your brief responses to the following questions:

- What are the two main challenges you face in relation to research budgets?
- Do you understand concepts such as direct and indirect costs, full costing, and indirect-cost rates?
- Does your institution have a policy on, or a standard approach to, research costing?
- Do you perceive a gap between your institution's policies and practices, and funder requirements, and if so, how have you attempted to manage this?

Lastly, notes and paper will be provided, but please bring a pen or pencil and a calculator to the workshop.

Training goals and course outline	
Training goals	Participants that attend this training workshop will: <ol style="list-style-type: none"> 1. <i>Develop a thorough understanding of the Five Keys good practice document.</i> 2. <i>Work through practical research costing examples, both individually and through interacting with other participants.</i> 3. <i>Discuss ways in which the Five Keys apply to their own institutions, projects, or research networks.</i>
Day 1 – Nuts and bolts of research costing (Keys 1 & 2)	
Morning (session 1)	Introductions, expectations and course overview
Morning (session 2)	Defining and categorizing direct and indirect costs
Afternoon (session 3)	Determining indirect-cost rates
Afternoon (session 4)	Determining indirect-cost rates (continued)
Day 2 – Managing grants effectively at your institution (Keys 3, 4, and 5)	
Morning (session 1)	Institutional management of research grants
Morning (session 2)	Developing relevant skills and competencies
Afternoon (session 3)	Bridging the gaps between funders and research institutions
Afternoon (session 4)	Discussion and synthesis of key learnings
Day 3 – Working through some practical examples	
Morning (session 1)	Examples from the <i>Five Keys</i>
Morning (session 2)	Examples from the <i>Five Keys</i> (continued)
Afternoon (session 3)	Own institution's examples
Afternoon (session 4)	Brief evaluation and conclusion

Detailed program and facilitation notes

Time	Session goals	Suggested activities to choose from	Suggested materials	Expected outcomes
Day 1 – Nuts and bolts of research costing (K1 & K2)				
<i>Morning</i> Session 1 (1,5 hours)	To introduce the course, the participants, and the learning goals	<ul style="list-style-type: none"> Introduce yourself and welcome participants to the workshop, and (see the notes that accompany Slide 1 for points you can raise as you do this) Work through Slides 2 to 6 to give participants an overview of the workshop and its aims Move on to Slides 7 to 15, and use the notes provided to help prompt a discussion about why the sustainability of research is so important Show Video 1, and lead a short discussion on any of the issues raised on pp. 4–5 of the <i>Five Keys</i> document Show Slides 16–20 if you want to explain more about where the <i>Five Keys</i> document comes from Divide participants into five groups of roughly equal size, and give each group a number from 1 to 5. If you have only five participants, give each person a number. Explain that at the end of the course, each group will have to give a short presentation on the Key that corresponds to their number 	Slides 1–20, Video 1, flipchart and markers, a copy of the Course Notes to hand out to each participant, copies of the <i>Five Keys</i> document to share	<ol style="list-style-type: none"> Participants understand the course goals and have had an opportunity to identify their expectations for the training workshop Participants gain insight into the link between research costing and institutional sustainability Participants understand the background to the development of the <i>Five Keys</i> Participants have a basic understanding of what the <i>Five Keys</i> document is about, and are aware of the central questions motivating the workshop
Break				
<i>Morning</i> Session 2 (1,5 hours)	<p>To describe and explain Key 1 (defining and categorizing direct and indirect costs)</p> <p>To give participants opportunities to practice identifying direct and indirect costs</p>	<ul style="list-style-type: none"> Introduce Key 1 to the participants using Slides 21–41 (allow time for reflection/discussion as indicated in the notes to the slides) Ask participants to list different terms used to describe direct and indirect costs and write these on a flip chart Show Video 2 on the importance of research costing and the relevance of direct and indirect costs Briefly discuss the case studies on pp. 10–11 of the <i>Five Keys</i>, and debate the significance of the discrepancies between the different institutions, including the challenges these could pose for researchers working with these institutions 	Slides 21–41 Video 2, <i>Five Keys</i> , flipchart and marker pens, calculators	<ol style="list-style-type: none"> Participants understand Key 1, notably the distinction between direct and indirect costs Participants have done some practical examples and are familiar with the concept of applying a percentage rate to the cost of the project in order to work out its full cost Participants have discussed some of the tensions that may arise when institutions with different approaches to research costing work together
Break				

Detailed program and facilitation notes continued...

Time	Session goals	Suggested activities to choose from	Suggested materials	Expected outcomes
Afternoon Session 3 (1,5 hours)	<p>To explain Key 2 (determining indirect-cost rates)</p> <p>To give participants an opportunity to explore four different approaches to determining indirect-cost rates</p>	<ul style="list-style-type: none"> Building on the discussion before the break, introduce Key 2 to the participants allowing time for reflection/discussion Explain the four different approaches to determining indirect costs (shown on pp. 12–13 of the <i>Five Keys</i> and Slides 42–59), as well as the issue of project pricing (Slides 50–53) Break into smaller groups to read and discuss the information about South Africa and the case study on pp. 14–15 of the <i>Five Keys</i> document Discuss with participants their experiences of working with different indirect-cost recovery rates, and why it is important to review these rates from time to time (practical examples are covered on Day 3) 	<p>Slides 42–53</p> <p>Flipchart and markers</p> <p>Course Notes</p> <p><i>Five Keys</i></p>	<ol style="list-style-type: none"> Participants understand the concept of an indirect-cost recovery rate Participants understand the four different approaches to determining indirect-cost rates Participants have identified and discussed using different methods for different contexts
Break				
Afternoon Session 4 (1,5 hours)	<p>To continue learning about Key 2</p> <p>To conclude the day by recapping information covered, and checking that participants are happy with the pace of the course</p>	<ul style="list-style-type: none"> Show Video 3, and review the case study in the <i>Five Keys</i> on p. 16 Review just the demonstration of the example in Video 3 (at 5.32 mins into the video) Encourage participants to attempt an example on their own Invite participants to review the four sessions of the day against their expectations for the training workshop, and manage participant expectations about what can be covered in the remainder of the workshop 	<p>Video 3</p> <p><i>Five Keys</i></p> <p>Flipchart and markers</p> <p>Course Notes</p>	<ol style="list-style-type: none"> Participants are familiar with a standardized approach to setting indirect-cost rates as endorsed by Higher Education South Africa (HESA) Participants have re-capped learnings from the day in a participatory way, and evaluated actual learning against their learning goals

Time	Session goals	Suggested activities to choose from	Suggested materials	Expected outcomes
Day 2 – Managing grants effectively at your institution (K3, 4, and 5)				
<i>Morning</i> Session 1 (1,5 hours)	<p>To introduce Key 3 (institutional management of research grants), especially the tenets of good grant management</p> <p>To give participants an opportunity to reflect on grant-management practices at their own institution</p>	<ul style="list-style-type: none"> Begin by reflecting on what was covered in Day 1, recap the learning goals for the course, and how these relate to what is planned for Day 2 Introduce Key 3 using Slides 54–58 (allow time for reflection/discussion as indicated in the slides) Review the case studies in on Key 3 in the <i>Five Keys</i> (pp. 20–21) View Video 4 Work in groups to discuss and document ways in which grant management can be strengthened in participant institutions (facilitator can take notes on the flipchart as groups report back) 	Slides 54–58, Video 4, K3 case studies, flipchart and markers, Course Notes	<ol style="list-style-type: none"> Participants grasp Key 3, and have reflected on their own experiences of grant management Participants have read and discussed two case studies on the importance of strong grant management Participants have discussed concrete ways in which grant management can be enhanced at their own institution
Break				
<i>Morning</i> Session 2 (1,5 hours)	<p>To introduce Key 4 (developing relevant skills and competencies)</p> <p>To give participants an opportunity to reflect on how they might be able to improve their own skills</p>	<ul style="list-style-type: none"> Introduce Key 4 using Slides 59–63 and drawing on your own knowledge Divide participants into pairs and run the role-play on p. 18 of this guide. Refer participants to the relevant page of their Course Notes Debrief the role-play by asking the pairs to report back about what they learned from the process Look at the list of skills and background knowledge on pp. 22–23 of the <i>Five Keys</i>, and ask the group to discuss how this compares to the skills they benchmarked in their discussion about the role-play 	Slides 59–63 Video K4 case study Course Notes Flip chart and markers	<ol style="list-style-type: none"> Participants learn about the link between individual and institutional capabilities in the context of grant management Participants are given an opportunity to assess the skills set required for grant management
Break				

Detailed program and facilitation notes continued...

Time	Session goals	Suggested activities to choose from	Suggested materials	Expected outcomes
<i>Afternoon</i> Session 3 (1,5 hours)	To introduce Key 5 (bridging the gaps between funders and research institutions)	<ul style="list-style-type: none"> ■ Introduce Key 5 using Slides 64–69, allowing time for discussion as indicated in the notes to the slides ■ Invite discussion on participants' experiences of working with different funders, asking them to identify any gaps or tensions they experienced ■ Take about 45 minutes to role-play the dialogue between researchers and funders. See the Course Notes and p. 19 of this guide for the scenario and descriptions of the various roles) ■ View video 5 and video 6 	Slides 64–69 Role-play sheets Course Notes Videos 5 and 6	<ol style="list-style-type: none"> 1. Participants are aware of the different approaches of funders and research institutions to research costing 2. Participants are encouraged to find consensus or compromise positions through role-play
Break				
<i>Afternoon</i> Session 4 (1,5 hours)	<p>To recap on what has been learned about Keys 3, 4 and 5</p> <p>To give you some insight into what to focus on for Day 3</p>	<ul style="list-style-type: none"> ■ Participants were assigned a Key number at the beginning of the course, and should now be given an opportunity to work together for ten minutes or so to develop a short presentation about their respective keys. The Course Notes and their own notes should provide the requisite points ■ One person from each group presents their Key. Fill in any points they may have missed ■ Refer participants to quiz in their Notes, and ask them to complete it (this shouldn't take more than 15 minutes) ■ Participants peer-assess each other's responses against the answers provided in the Course Notes 	Course Notes Flipchart and markers	<ol style="list-style-type: none"> 1. Participants have had to internalize <i>and</i> present their new knowledge of the <i>Five Keys</i> to the rest of the group 2. Participants have tested their knowledge in a quiz and learned from marking one another's responses

Time	Session goals	Suggested activities to choose from	Suggested materials	Expected outcomes
Day 3 - Looking at practical examples				
<i>Morning</i> Session 1 (1,5 hours)	To provide participants with an opportunity to work through some practical examples	<ul style="list-style-type: none"> Introduce the program for the day, using the Notes provided with Slide 71 for guidance Participants spend about an hour working in groups on Examples 1 and 2 in the Course Notes Spend 20-30 minutes working through the solutions to the exercises as provided in the Course Notes 	Course Notes Flipchart and markers	Participants have completed relevant costing calculations by applying principles learned during the workshop
Break				
<i>Morning</i> Session 2 (1,5 hours)	To give participants an opportunity to work through practical examples	<ul style="list-style-type: none"> Follow the same process as used in the morning session, this time using Examples 3 and 4 in the Course Notes Before attempting Example 4, see Slides 71–75 	Slides 71–75 Flipchart and markers	Participants have completed relevant calculations by applying principles learned during the workshop
Break				
<i>Afternoon</i> Session 3 (1,5 hours)	To provide participants with an opportunity to discuss their own budgetary or costing concerns	<ul style="list-style-type: none"> A few participants should be encouraged to present their budget example (this needs to be arranged prior to the workshop) NB! An experienced financial officer should be asked to attend this section of the training if possible to provide advice/input 	Flipchart and markers	<ol style="list-style-type: none"> Participants have received clear guidance on particular budgeting or costing challenges from the facilitator and/or a financial officer Participants know where to find further information to consolidate their learning
Break				
<i>Afternoon</i> Session 5 (0,5 hours)	To give participants an opportunity to evaluate and give feedback on the training program	<ul style="list-style-type: none"> In a discussion format, review together with the participants whether the stated learning goals were adequately addressed through the workshop Explain that evaluation is useful for you and will help improve the course for future participants Explain that participants don't have to put their names on the form unless they would like to. Ask them to be very open and honest Distribute evaluation forms, and give participants time to fill them in 	Slides 76–77 Copies of the evaluation form on p. 8 of this guide	Participants have reflected on the quality of their learning experience, and given feedback to the trainer

Role-play 1: The Interview

Simulating a job interview using role-play can sensitize participants to the specific skills, knowledge, attributes, and self-awareness required by an individual employed in a particular job. This role-play is designed to assist participants at the workshop to reflect, not so much on their own specific knowledge or skills, but rather on what is required from an effective grants manager. Interview questions and space for participants to write down their responses is provided in the Course Notes.

Facilitation steps

- Divide the participants into pairs. You may need to participate if you have an uneven number in the group.
- Read the newspaper advertisement as it appears in the Course Notes.
- Each group should decide who is going to be interviewer, and who will be the interviewee.
- Tell the pairs that they have ten minutes to complete the interview.
- After the first interview is over, ask participants to find new partners, and switch roles.
- After each person has completed two interviews, once as the interviewer and once as interviewee, encourage them to compare their notes against the list of competencies on p.23 of the *Five Keys*, and the job-profile diagram provided.
- Debrief the roles and facilitate a ‘benchmarking’ discussion, where pairs present their answers to a specific question to the whole group

Interview questions (as per the Course Notes)

- Why do you think universities and research organisations conduct research?
- What do you consider to be the main roles of a research-support office in a university?
- What specific knowledge, skills, and abilities do you have that will help our research-support office to improve the performance of our university’s researchers?
- Describe the key support roles that you think a research manager can play before and after a research grant is awarded, that is, in the pre- and post-award periods.
- What are some of the personal qualities or attributes that you think an effective research manager needs?

Role-play 2: A dialogue between funders and research institutions

This role-play is designed to simulate a discussion between funders of research and research institutions when there are differences in approaches to indirect costing. Role-plays can be especially powerful when they encourage participants to momentarily step into the shoes of another and consider an issue from a different perspective. The aim of this role-play is to see how close the groups can get to a negotiated agreement on an appropriate indirect-cost recovery rate, or alternatively, develop another set of proposals to ensure that the research program can continue.

Facilitation steps

- Divide participants into six groups, each one representing a different organization (if you have only six people, this will still work).
- Refer the groups to the background information provided in their Notes (also shown below). This will set the scene for them. Then, give each group the additional information about themselves provided on page 20 which you have copied and cut up, ready to hand out. Ask the groups not to share this new information with each other. To add a further element, you could allocate names to each group, using the names of actual funders and institutions that the participants know and recognize.
- Check how the groups are doing, making sure that everyone knows all the terms used in the role descriptions, and that they all understand the scenario.
- Give the groups 10 minutes to prepare a short statement on their position which they will present to the larger 'meeting'.
- Allow each group no more than three minutes to present their points. Chair this tightly. Then give the group another 10 minutes to discuss the merits of the different arguments, while still trying to negotiate for the rate they proposed or to put forward an alternative proposal that will help the group to reach consensus. If consensus is reached, the role-play can be brought to a close.
- Facilitate a debriefing session to allow participants to reflect on the challenges of representing different positions and on what they learned from the process.

A dialogue between funders and research institutions: background information

Three major global research funders have co-designed a new research-funding program and have identified three successful research proposals to receive the first funding tranche. At a pre-award consultative meeting between the funders and the three successful project coordinators, one agenda item concerns the indirect-cost recovery rate put forward by the funders in the call document. The funders have agreed that their rate for the re-imbursement of indirect costs will amount to only 9% of personnel costs. Furthermore,

that recipients will not be able to include the costs of items such as equipment purchased, travel and subsistence, consultancies used, or conferences attended when calculating the total amount of indirect costs to be recovered. After serious complaints from one of the project coordinators, which threatened to derail the launch of the research program, the funders have agreed to meet with the recipients to discuss the terms and conditions of the funding.

Funder 1

You represent a state funding agency. Your institution's policy limits reimbursement of indirect costs to 10% of all the direct costs of a project – this includes equipment, travel and subsistence, personnel but *not* consultancies or conferences. You have no mandate to exceed this policy and your agency's administrative wheels turn very slowly. It is highly unlikely you would be able to change the institution's policy on indirect-cost recovery for the purposes of this program.

Funder 2

You are the manager(s) of a large private foundation. Your organization does not agree with the principle of funding indirect costs, but allowed the 9% to go through — as a special board-approved exception — because this program should give your foundation some good publicity, and enhance its reputation as a significant player in this field. You have strict instructions from your board not to agree to any further increase in the indirect-cost recovery rate at this meeting.

Funder 3

You represent the world's largest private research-funding agency. Your agency's indirect-cost recovery policy allows for up to 11% of the direct costs of a project to be recovered. There is no specific directive that this 11% should exclude consultancies, conferences, equipment, or travel and subsistence.

Project Coordinator 1

Your research institution's policy for the current financial year has set the indirect-cost recovery rate at 29%. As a highly respected researcher, the university has given you special permission to participate in this project. Hearing about this meeting has encouraged you to try and push for a rate of 15%, but you are prepared to accept a lesser amount in the interests of forging relationships with these funders and research institutions. However, you expect the donors to acknowledge that the project will operate at a loss as far as your institution is concerned.

Project Coordinator 2

Your institution's indirect cost-recovery policy is still being drafted. You are not fully aware of why the other research institutions should have a problem, and simply want to get the funds and start the research.

Project Coordinator 3

Your research institution's policy is to recover 20% of the direct costs of all research projects for indirect costs. Your executive director is unlikely to approve the project unless a rate of at least 15% is agreed to.

OPTION 2: COURSE OUTLINE FOR A THREE-HOUR SEMINAR

Summary and learning goals

This three-hour seminar is designed to give participants a brisk overview of the *Five Keys* document. This seminar is designed for between 5 and 15 participants who will be given an opportunity to:

- Develop a *basic understanding* of the basic concepts in the *Five Keys* good practice document, including in the case studies.
- Work through a few of the practical examples of research costing given in the Course Notes; this can be done individually or through interaction with other participants.
- Discuss how the *Five Keys* apply to their institutions, projects, or research networks.

Because there is a lot to cover in a short time, and any one of the Keys could generate long discussions, encourage participants to ask questions of clarification during the sessions if there is anything that they don't understand, but to reserve other ideas and suggestions for the final session when there will be time for discussion. The event can be divided into six sessions of about 20 minutes each, plus a longer introductory session and a 40-minute discussion at the end, which can continue on into tea time if necessary.

- Session 1 is introductory.
- Sessions 2 to 6 work quickly and systematically through the *Five Keys* using the slide presentation provided and a few examples and case studies.
- Session 7 provides an opportunity for discussion or for working through a couple of practical examples.
- Session 8 concludes the seminar with a quick evaluation.

Preparation

The seminar requires both facilitators and participants to spend some time preparing.

For facilitators, important aspects of preparation include:

- Reading or reviewing the *Five Keys* document to make sure you understand it all well.
- Reviewing the relevant sections of this guide and the suite of training materials in this resource pack.
- Identifying of a cohort of participants, informing them about the training program, and encouraging them to prepare for the workshop. A draft message is included on the next page that you can use as the basis of an email to participants.
- Organizing a venue, equipment and catering.
- Reviewing each session and choosing from among the suggested activities. Reviewing the slide presentation and notes in Notes View, as well as rehearsing the slide presentation to ensure that you don't run over time.
- Reviewing the Course Notes so that you know which sections participants will need to use, and printing a copy for each participant.
- Thinking about questions that participants are likely to raise, and preparing some model answers. Remember: if questions are asked that you don't have answers for, it is perfectly acceptable to admit that you don't have the answer. Tell trainees that you will try to find out and send them a response by email after the seminar.

Draft message that you can adapt and email to participants

New Message

Send Chat Attach Address Fonts Colors Save As Draft Photo Browser Show Stationery

To: _____

Subject: The upcoming workshop on research costing

From: _____ Signature: None

Dear Participant


Thank you for your interest in the upcoming course on research costing. The course will be held from [insert dates and times] at [insert venue]. Refreshments will be served after the course.

The course outline is attached (see below). To ensure that you get the most from the training, you are strongly encouraged to prepare for the workshop by reading the attached *Five Keys* document [attach pdf file]. Please give yourself enough time to grasp the concepts behind each of the Five Keys.

To help me to tailor the workshop to your specific needs, it would be useful if you could send me your brief responses to the following questions:

- What are the two main challenges you face in relation to research budgets?
- Do you understand concepts such as direct and indirect costs, full costing, and indirect-cost rates?
- Does your institution have a policy on, or a standard approach to, research costing?
- Do you perceive a gap between your institution's policies and practices, and funder requirements, and if so, how have you attempted to manage this?

Lastly, notes and paper will be provided, but please bring a pen or pencil and a calculator to the workshop.



Seminar program and expected outcomes
Seminar outcomes: Participants that attend this seminar will:
1. Develop a basic understanding of the contents of the <i>Five Keys</i> good practice document, including some of the case studies
2. Work through a small number of practical research costing examples
3. Discuss ways in which the <i>Five Keys</i> might apply within the context of their institutions, projects, or research networks
Outline of seminar
Session 1 – Introduction and overview
Course overview and learning goals
Sessions 2–6 – Five keys for improving research costing
Key 1: Defining and categorizing direct and indirect costs
Key 2: Determining indirect-cost rates
Key 3: Institutional management of research grants
Key 4: Developing relevant skills and competencies
Key 5: Bridging the gaps between funders and research institutions
Sessions 7–8 – Discussion and way forward
Examples from the <i>Five Keys</i> document
Evaluation and conclusion

Suggested program and detailed facilitation notes

Time	Session goals	Suggested activities to choose from	Suggested materials	Expected outcomes
Session 1 (20 mins)	To introduce yourself, explain the reason behind the seminar, and review the outline and expected outcomes as emailed to participants	<ul style="list-style-type: none"> Introduce yourself and ask participants to do likewise, briefly sharing why they have come to the seminar and what they hope to gain from it. (Open the slide presentation in Notes View and see the Notes to Slide 1 for some suggestions on this) Give a quick course overview using Slides 2–3, and hand out a copy of the Course Notes to each participant, explaining briefly what is included and that participants can add their own notes to the pages Use Slides 4–5 to touch on why research costing is important in the larger context of institutional sustainability and future research Show Video 1, take questions if there are any, then briefly recap by discussing the issues raised on pp. 4–5 of the <i>Five Keys</i> 	Slides 1–6 Video 1 Course Notes to hand out	<ol style="list-style-type: none"> Participants understand the learning goals and have had an opportunity to identify their expectations for the training workshop Participants are provided with a ‘bigger picture’ argument about the link between research-costing practices and institutional sustainability Through viewing Video 1, participants understand the background to the <i>Five Keys</i>
Session 2 (20 mins)	To describe and explain Key 1 (defining and categorizing direct and indirect costs)	<ul style="list-style-type: none"> Introduce Key 1 to the participants by presenting Slides 7–16 (allow time for reflection/discussion as indicated in the slides) Brainstorm with participants some of the different terminologies used to describe direct and indirect costs and write these down View Video 2 on the importance of research costing and the identification of direct and indirect costs In groups or individually, work through Examples 1 and 2 in the Course Notes 	Slides 7–16 Video 2 Course Notes	<ol style="list-style-type: none"> Participants grasp the contents of Key 1, notably the distinction between direct and indirect costs Participants have worked through two examples and are familiar with the concept of applying a percentage rate to the cost of the project in order to work out its full cost
Session 3 (20 mins)	To introduce Key 2 (determining indirect cost rates)	<ul style="list-style-type: none"> Introduce Key 2 to the participants using Slides 17–28 (allow time for discussion as indicated in the slides) Using the slides, explain the four different approaches to determining indirect costs as identified on pp. 12–13 of the <i>Five Keys</i> Read and review the South Africa and Stellenbosch University case study on pp. 14–16 of the <i>Five Keys</i> with participants 	Slides 17–28	<ol style="list-style-type: none"> Participants are familiar with the concept of an indirect cost recovery rate Participants understand the four different approaches identified within Key 2

Time	Session goals	Suggested activities to choose from	Suggested materials	Expected outcomes
Session 4 (20 mins)	To introduce Key 3 (institutional management of research grants), as well as the concept of grant management	<ul style="list-style-type: none"> Introduce Key 3 using Slides 29–32 (allow time for reflection/discussion where indicated in the slides) Invite discussion about grant management at participants' institution – asking the group to identify the strengths, gaps, and opportunities Read and review the case studies in the <i>Five Keys</i>, and view Video 4, then work in groups to brainstorm ways in which grant management can be strengthened within participant institutions 	Slides 29–32 Video 4 Flipchart and markers Course Notes	<ol style="list-style-type: none"> Participants have grasped Key 3, and reflected on their own experiences of grant management Participants have discussed the importance of strong grant management Participants have brainstormed ways of strengthening grant management at their institution
Session 5 (20 mins)	To introduce Key 4 (developing relevant skills and competencies)	<ul style="list-style-type: none"> Introduce Key 4 using Slides 33–37. Expand a bit based on your own knowledge of research and innovation management 	Slides 33–37	<ol style="list-style-type: none"> Participants learn about the link between individual and institutional capabilities in relation to grant management
Session 6 (20 mins)	To introduce Key 5 (bridging the gaps between funders and research institutions)	<ul style="list-style-type: none"> Introduce Key 5 using Slides 37–41 (allow time for discussion as indicated in the notes to the slides) Invite discussion on participants' experiences of working with different funders, and try to pinpoint where the gaps and tensions lie 	Slides 37–41 Flipchart and markers	<ol style="list-style-type: none"> Participants are aware of the gaps between funders and research institutions on research costing
Break				

Time	Session goals	Suggested activities to choose from	Suggested materials	Expected outcomes
Session 7 (40 mins)	To deepen participants' understanding in one or more areas covered in the previous sessions, through either, facilitated discussion, working through a practical example, or a quiz	<ul style="list-style-type: none"> Facilitate a discussion: based on the information included in the case studies on pp. 10-11 of the <i>Five Keys</i>, focus discussion on the discrepancies between the different institutions, that is, the Joint Clinical Research Centre, the University of Botswana, and the International Development Research Centre. Ask the group to consider what challenges this could pose for researchers working with these institutions? Using the Course Notes, select an appropriate example to work through with the participants, and encourage discussion as you go along. Do the test your knowledge quiz: ask participants to complete the 15-minute quiz in the Course Notes and peer-assess the answers via a group discussion 	Flipchart and markers <i>Five Keys</i> Course Notes	1. Participants have had the opportunity, through discussion or practical engagement, to engage with the key issues raised in the workshop, and extended their knowledge of the issues involved
Session 8 (5 mins)	To allow participants an opportunity to evaluate the training experience	<ul style="list-style-type: none"> Show Slides 42–45 to sum up and end off the seminar Distribute evaluation forms for completion in the session Collect the evaluation forms from the participants (note: the template provided in this facilitator's guide is an anonymous evaluation form) End with refreshments and encourage further discussion over tea 	Slides 42–45 Evaluation form	<ol style="list-style-type: none"> Participants know where to find further information about the <i>Five Keys</i> Participants have reflected on the quality of their learning experience and communicated with the trainer

OPTION 3: COURSE OUTLINE FOR A ONE-HOUR PRESENTATION

Summary and learning goals

The one-hour presentation is suitable for situations such as conferences or research-network meetings, where the opportunity to discuss research costing may be desirable, but has to fit into a broader program. In these situations, a short but high-impact presentation will sensitize participants to the challenges of research costing, alert them to the existence of the *Five Keys* document, and foster debate about the need for institutional alignment or organizational change.

This presentation can be given to small or large groups. Participants who attend this training workshop will have an opportunity to:

- Develop a basic understanding of the contents of the *Five Keys* document.
- Reflect on and discuss some of their own challenges related to research costing with a view to identifying possible solutions or interventions.

Preparation

Delivery of this presentation requires the facilitator to ‘read’ the audience, and try to tailor the content of the slide presentation to meet their needs.



Suggested program and facilitation notes

Time	Session goals	Suggested activities to choose from	Suggested materials	Expected outcomes
Part 1 (15-20 mins)	To introduce the issue of research sustainability, the <i>Five Keys</i> document, and Keys 1 and 2 in particular	<ul style="list-style-type: none"> Using Slides 1–6, introduce yourself and the <i>Five Keys</i>, and outline what you aim to cover in the presentation Introduce Key 1 to the participants by presenting Slides 7–12 Introduce Key 2 to the participants using Slides 13–16 	Slides 1–16	1. Participants grasp the concepts involved in Keys 1 and 2, notably the distinction between direct and indirect costs, and the notion of indirect-cost recovery rates
Part 2 (15-20 mins)	To introduce participants to Keys 3, 4, and 5	<ul style="list-style-type: none"> Introduce Key 3 using Slides 17–20 Introduce Key 4 using Slides 20–25 – this could be elaborated based on your knowledge of research and innovation management networks and actors Introduce Key 5 using Slides 26–29 	Slides 17–29	1. Participants have grasped Keys 3–5, and are sensitized to the link between individual and institutional capabilities in the context of grant management, and to the need for dialogue between research institutions and funders on research costing
Part 3 (10-15 mins)	To allow for discussion of the issues and principles discussed so far	<ul style="list-style-type: none"> Identify a relevant example or case study from the <i>Five Keys</i> to present to the audience. Alternatively, screen one of the short videos to elicit some discussion and interaction 	<i>Five Keys</i> or Video	1. Participants have worked through a practical example, case study, or illustrative videos
Part 4 (10 mins)	To elicit further debate and, if appropriate, discuss if there is a need for further in-depth training	<ul style="list-style-type: none"> Invite questions or comments on particular topics or issues of concern to the audience 	Slides 30-33	<ol style="list-style-type: none"> Participants have raised questions or comments, and these have been addressed by the presenter The need for more in-depth training on the topic has been explored and, if necessary, next steps identified

DOING THE CALCULATIONS

The calculations included in this section provide a set of graded practical examples for trainers to work through with participants. The level of difficulty increases from one example to the next. The examples and solutions that follow are included in the Course Notes.

Facilitation tips

- Work through each example yourself first so that you understand the calculations
- If you do not feel completely confident about working with the costing examples included in this manual, consider asking a colleague who has more experience of research costing to participate in this section of the training. This will give participants the expert sounding board they need, and enhance your own learning as a facilitator.
- Encourage participants to work in small groups when tackling each example. Once each small group has completed their work, gather participants into the large group and explain the steps required to reach each answer.
- Note that the four examples here are included in the Course Notes, and the solutions are in the appendices of that document.

Working with participants' own examples

If you are running a training session that is longer than an hour or two, we strongly recommend that you set aside some time during the training session to work through actual examples provided by participants, such as: difficulties they have had in drawing up actual project budgets; budget templates provided by donors that do not harmonize with research institutions' systems and increase the researchers' and administrators' workloads; and (for fairly experienced research or financial managers) how their institution's audited financial statements can provide a basis for working out indirect-cost recovery rates.



Example 1: Calculating indirect costs using a given indirect-cost rate

Scenario

You are developing a research-project budget. For this project:

- Personnel costs (including US\$8,000 for PhD bursaries) amount to US\$10,500.
- Operating costs consist of:
 - US\$1,000 for a survey
 - US\$500 for access to some rare historical papers
 - Publication fees US\$300
- Office space is provided by the university.
- There are no capital costs.
- The institution's indirect-cost recovery rate is 25%.

Task

Calculate the full cost of the project.

Solution

Category	Description	Label	Formula	Amount (US\$)
Direct costs	Salaries	A		2,500
	Bursaries	B		8,000
	Operating	C		1,800
	Sub-total	D	A+B+C	12,300
Capital costs	Equipment	F		0
Indirect-cost rate	25%	E	E x D	3,075
Full cost			D+E+F	15,375

Example 2: Applying an indirect-cost recovery rate

Scenario

Imagine you are a participant in a large multi-partner project funded by the European Union. According to the rules of the program, participants that calculate indirect costs at a rate of 20% will be eligible to recover only 35% of that amount from their EU grant. Furthermore, indirect costs cannot be claimed for work that is subcontracted or carried out away from your premises. You have calculated that your participation in the project for the first financial year includes the following costs:

Personnel (A)	£45,567
Subcontracting (B)	€30,000
Researcher from a nearby university contracted to work on the project <i>on</i> your premises (C)	€10,000
Researcher from a nearby university contracted to work the project <i>off</i> your premises (D)	€10,000
Travel (E)	€23,489
Equipment/capital costs (F)	€190,000
Total	€309,056

Task

Calculate how much your institution is entitled to claim for indirect costs.

Solution

Step 1. Work out how much the indirect costs of the project amount to.

Personnel (A)	£45,567
Subcontracting (B)	€30,000
Researcher from a nearby university seconded to work on the project from your premises (C)	€10,000
Researcher from a nearby university contracted for a short period to work on the project who does not work at your premises (D)	€10,000
Travel (E)	€23,489
Equipment/capital costs (F)	€190,000
Total	€309,056

Step 2. Subtract the subcontracting and the contract research not done on the premises of the beneficiary because these are not allowable under the terms of the grant:

$$€309,056 - (€30,000 + €10,000) = €269,056$$

Step 3. Multiply the amended total by 20%.

$$€269,056 * 0,2 = €53,811.20$$

Step 4. Multiply the result (quotient) by 35%.

$$€53,811.20 * 0,35 = €18,833.92$$

Your institution is entitled to claim €18,533.92 in indirect costs for this project.

Example 3: Calculating a project budget

Scenario

Imagine you are supporting a principal investigator to prepare a budget for a two-year research project. The principal investigator has given you the following information and instructions:

- Four staff members will be assigned to the project for its duration, and their salaries will be allocated to the project as follows: one senior researcher (100%); two junior researchers (75%); one administrative assistant (25%). For budgeting purposes, a standard salary of US\$5,000 per month is applied for all staff assigned to the project.
- The project's travel schedule in each year is as follows: 3 trips to Europe (US\$4,000 per trip all inclusive); 1 to West Africa (US\$2,000 per trip all inclusive); 12 trips in southern Africa (US\$1,000 per trip all inclusive).
- The project requires two new computers with software (US\$ 3,000). The project's website is anticipated to cost US\$ 500 per year. A video camera is required for fieldwork (US\$ 2,000).
- Two offices will be needed to accommodate the project in your institution. A breakdown of annual office costs provided by your office administrator is as follows:

Office costs	Year 1 (US\$)	Year 2 (US\$)	Total (US\$)
Office rent (for two university offices)	3,500	3,850	7,350
Consumables	400	440	840
Other services	2,000	2,200	4,200

- The project expects to host two seminars per year, each of which will cost US\$10,000.
- Survey costs are expected to amount to US\$8,000
- Five policy briefs will be published US\$2,000 per brief.
- Allow for evaluation costs of US\$10,000, and auditing costs of US\$4,000.
- Allow for a 5% contingency reserve.
- The maximum indirect-cost rate is 7%.

Task

Calculate the two-year project budget.

Solution

Project budget for two years (1 January 2011 to 30 December 2012)					
	Description	Units	Unit cost (US\$)	Costs (US\$)	Notes
		(A)	(B)	(A) x (B)	
1. Salaries (gross)					
Senior researcher (1 person at 100%)	Salary	2	5,000	10,000	1 staff member for 2 years x the annual salary rate
Junior researcher (2 persons at 75%)	Salary	4	5,000	15,000	2 staff members for 2 years x 75% of the annual salary rate
Administrative staff (assistant at 25%)	Salary	2	5,000	2,500	1 staff member for 2 years x 25% of the annual salary rate
<i>Subtotal</i>				27,500	
2. Travel					
In Europe	All inclusive	6	4,000	24,000	No. of trips x cost per trip
In West Africa	All inclusive	2	2,000	4,000	
In southern Africa	All inclusive	24	1,000	24,000	
<i>Subtotal</i>				52,000	
3. Equipment and supplies					
Computer equipment	Computers & software	2	3,000	6,000	No. of units x cost per unit
Other	Video	1	2,000	2,000	
Web hosting service	Annual fee	2	5,000	1,000	
<i>Subtotal</i>				9,000	
4. Office costs					
Rent	Two offices			7,350	
Consumables				840	
Other services	Cleaning, etc.			4,200	
<i>Subtotal</i>				12,390	
5. Other costs / services					
Conferences/seminars		4	10,000	40,000	No. of publications x unit cost
Survey costs		1	8,000	8,000	
Publications		5	2,000	10,000	
Evaluation costs		1	10,000	10,000	
Auditing costs		1	4,000	4,000	
<i>Subtotal</i>				72,000	
6. Subtotal of eligible direct costs				172,890.00	Add subtotals of items 1–5
7. Provision for contingency reserve				8,644.50	(5% of item 6)
8. Total eligible direct costs				181,534.50	(6 + 7)
9. Administrative costs				12,707.42	(max 7% of item 8)
Total eligible costs				195 365.42	(9+10)

Example 4: Calculating an indirect-cost recovery rate

The figures in this example are taken from those used in Video 3. Terms and processes used are explained in a little more detail here, so doing this example will reinforce lessons learned from the video.

Scenario

Imagine you have been appointed as Research Manager at Stellenbosch University in South Africa, and you want to check that the indirect-cost recovery rate you have been given by the financial manager is accurate.

Task

Use the annual audited financial statement shown below to calculate the amount spent on the university's indirect-costs, then set the percentage that you think would make a reasonable indirect-cost recovery rate.

Consolidated income statement for the year ended 31 December 2010				
	Unrestricted funds	Restricted funds	Accommodation	Consolidated
TOTAL INCOME	777,600	341,000	43,650	1,162,250
Recurrent revenue	775,000	341,000	43,500	1,159,500
State subsidies and grants	500,000	100,000	-	600,000
Student fee revenue	200,000	2,000	40,000	242,000
Income from contracts	15,000	200,000	-	215,000
For research	10,000	150,000	-	160,000
For other activities	5,000	50,000	-	55,000
Other service revenue	2,000	1,000	1,000	4,000
Private gifts and grants	1,000	20,000	-	21,000
Other recurrent income	40,000	12,000	2,500	54,500
Sub-total	758,000	335,000	43,500	1,136,500
Interest received	15,000	5,000	-	20,000
Dividends received	2,000	1,000	-	3,000

	Unrestricted funds	Restricted funds	Accommodation	Consolidated
TOTAL EXPENDITURE	707,350	270,000	42,000	1,019,350
Recurrent items	707,000	270,000	42,000	1,019,000
Personnel	520,000	130,000	30,000	680,000
Academic	280,000	50,000	-	330,000
Other	240,000	80,000	30,000	350,000
Other operating expenses	140,000	140,000	10,000	290,000
Depreciation	40,000	-	2,000	42,000
Sub-total	700,000	270,000	42,000	1,012,000
Finance costs	7,000	-	-	7,000
Non-recurrent items	350	-	-	350
Personnel	-	-	-	-
Realised loss on disposal of marketable securities	350	-	-	350
Post-employment-fund surpluses	-	-	-	-
Net surplus / (deficit)	70,250	71,000	1,650	142,900

Solution

Step 1. Calculate the percentage of externally funded research as a proportion of total expenses

Cost items	Label	Formula	Expenditure
Recurrent unrestricted, excluding residences ¹	A		707,000
Recurrent restricted, excluding residences ²	B		270,000
Total expenditure ³	C	A + B	977,000
Percentage of total expenses obtained from external funders ⁴	D	B / C	28%

Notes

¹ This represents expenditure incurred as the institution carries out its operational teaching and learning mandate. The funds used to cover these costs are known as 'unrestricted', that is they are not ring-fenced by the state or donors for research or other specific purposes. These expenses also exclude student accommodation costs.

² This represents expenditure incurred by the institution as it carries out its research mandate. The funds used are 'restricted', that is, they are obtained from external funders and can only be used to pay for research projects and programmes as specified by those funders.

³ This is the sum of unrestricted and restricted expenditure.

⁴ This is the percentage of restricted expenditure as a proportion of total expenditure.

Step 2. Calculate the indirect cost recovery rate

	Label	Formula	Expenditure
Determine total expenditure from support departments ¹	E		230,000
Indirect cost attributable to restricted funds ²	F	D x E	63,562
Research-support costs ³	G		4,000
Total indirect costs (research related)	H	F + G	67,562
The indirect-cost recovery rate ⁴	I	H / B	25%

Notes

¹ Support costs are central administration costs and can be obtained from management accounts. Exclude line items that are unrelated to research support such as expenditure on sport, security and undergraduate-student services as these are added in separately below.

² Proportion as derived for D in the previous table.

³ Research-support costs include the personnel and operating costs of running the institution's research office (obtain these from management accounts).

⁴ The indirect-cost recovery rate represents the indirect costs expressed as a percentage of restricted expenditure.



Secretariat is hosted at:



TDR/World Health Organization

20, Avenue Appia

1211 Geneva 27

Switzerland

Fax: (+41) 22 791-4854

tdr@who.int

www.who.int/tdr