

Activity Progress Report

Infrastructure Skills for Development Q2: April - June 2015

Australia-Africa Partnerships Facility

An initiative of the Australian Government



Table of contents

1.	Acknowledgements	3
2.	Executive Summary	4
3.	Introduction	7
4.	Background	7
5.	Activity Progress Quarter Two: April - June 2015	8
5.1	Project Oversight	8
5.2	Monthly Learning Set Group Meetings	9
5.3	Monthly One-on-One Participant-Mentor Meetings & WBP progress	10
5.4	Quarterly Progress in On-line Learning	11
5.5	Insights Gained from Home Visits	12
6.	Lessons Learned During Second Quarter Implementation	14
7.	Next Steps	14
List	of annexes	
Anne	ex 1 – Statistical Annex: Reporting against M&E Indicators	16
Anne	ex 2 – Cumulative Record of Lessons Learned on the IS4D Program Model	22
Lesso	ons from Quarter 1	22
Lesso	ons from Quarter 2	22
Anne	ex 3. Deniction of Cross-Border Collaboration among Power Sector IS4D Participants	24

1. Acknowledgements

Cardno Emerging Markets (Australia) Pty Ltd manages the Australia-Africa Partnerships Facility (AAPF) on behalf of the Department of Foreign Affairs and Trade (DFAT) of the Australian Government.



The NEPAD Planning and Coordinating Agency is the primary implementation partner for IS4D.



Central Institute of Technology, an Australian Registered Training Organisation is the sub-contracted provider of on-line learning via modules from the standard level Project Management Diploma series.

University of Queensland is the sub-contracted provider of customised training in Financing Options for Infrastructure and Negotiation Skills Training.

Meredith Turnbull Consulting and Development Bank of Southern Africa are the sub-contracted providers of Leadership Training.

2. Executive Summary

April to June 2015 constituted the second quarter of implementation activity under the Infrastructure Skills for Development (IS4D) program. This quarter concentrated on supporting IS4D participants to return to their jobs within their home agencies to begin applying upgraded project management skills being acquired on an on-going basis as they resumed their work responsibilities. During this period the participants embarked upon the online curricula in two Project Management modules of their choice with the support of CIT, while applying their new learning to implementation of their work-based projects (WBPs). For the most part, mentors and participants connected twice each month—once as a whole group and once individually. In June, the IS4D Strategic Adviser and a delegate of DFAT conducted 'home visits' to 9 of the 17 Agencies employing enrolled participants to learn first-hand how the program is responding to Agency needs, participant aspirations and IS4D program goals. All three sources—CIT, Mentor and Home Visit reports—have contributed to the findings of this quarterly report.

IS4D has two specific development objectives:

- > To improve the infrastructure project management skills of participating public sector professionals, and
- > To enable their Agencies working on PIDA program delivery to more effectively implement cross-border infrastructure projects.

The logic is that Action Learning for individuals combined with peer to peer practitioner networks can foster institutional learning that leads to improved coordination, design and packaging of priority regional public infrastructure projects. This report records evidence garnered during the quarter that the desired learning is taking place at both individual and institutional levels.

Evidence of Individual Learning from Work-Based Projects, Mentoring and Online Courses

- 29 participants are progressing steadily against the milestones and objectives of their projects. Three are at or near completion with their WBP as it was defined at the outset. Two are experiencing delays outside their direct sphere of influence and are learning the frustrations of being in a beneficiary role instead of being in the driver's seat. In three cases, IS4D participants are suffering from to their WBP brought about by external circumstances but are continuing to learn through the mentoring and peergroup participation, online courses and upcoming enrichment activity.
- Each participant specified between 2 and 4 personal learning goals during the inception workshop to identify key skills they wished to improve through their WBP. They self-rated their beginning skill level on a 1 to 5 scale where 1 = no skills, 3 = some skills and 5 = competence. At the June mid-point, participants were asked re-rate their skill level. Averaged across all categories, participants reported that they are making progress in gaining project management competencies. In aggregate, the cohort now estimates having an average skill-level of 3.57 across 29 different learning goals. This is up 1.2 points or a 51% improvement from a self-assessed baseline of 2.37 at the outset.
- ➤ General feedback from participants interviewed during home visits is that they value the online learning via Project Management modules because the content is highly relevant to them and immediately applicable. For example, several participants indicated that they would normally have a stakeholder engagement plan or a risk management plan loosely organized in their head, but by having to put it on paper for submission to CIT, they have taken a much more explicit and rigorous approach which has helped them improve their performance both on their WBP and all of their other work. Nonetheless, some participants are finding it difficult—not with the course content—but with their ability to make time for the on-line learning component of IS4D.

Home visit interviews also confirmed a high level of appreciation by participants of their mentors with evidence that mentors are applying the action learning approach.

Evidence of Peer Learning from Mentor-facilitated Group Sessions

- ➤ Participants interviewed during home visits indicate that they are finding all elements of the program to be valuable and worth the time invested. While they were generally reluctant to rank the program components, there was consistent feedback that they view the peer networking as the most attractive element of the program. Several groups have, on their own initiative, established mobile connectivity using the Whatsapp app and they frequently consult each other about work-place challenges or online learning assignments in between formal meetings. Mentors report a high degree of cohesion within their Learning Set groups.
- Participants from multi-sector learning sets report that they learn from each other just as well as from same-sector peers because project management challenges are similar and relevant across sub-sectors. For example, a Kenyan road engineer gleaned some useful insights from power sector peers on conflict mitigation approaches with angry community members. He also took advice from Uganda peers on better ways to deal with detection of defects prior to accepting a construction contractor's work. An engineer with Kenya Railways Corporation reported gaining useful insight from a Ugandan road engineer on how to deal with material quantities estimations and oversight of contractor labor.
- In group meetings, participants also gain value regardless of whether they are the presenter or whether they are listening to others' challenges. Even if their WBP is at a different stage within the project cycle, participants like hearing about others' challenges because it gives them an idea of what to anticipate within their own projects down the line.

Evidence of Cross-Border Collaboration Arising through IS4D Networks

- Kenya and Tanzania have formed a joint technical committee for the preparation of construction on their respective national transmission lines that will connect at the border. Two IS4D participants have worked jointly to produce harmonized tender documentation for construction contractors and have jointly short-listed and held pre-bid briefing sessions with six short-listed contractors. TANESCO's Deputy Managing Director of Investment told the home visits delegation that the cross-border nature of IS4D participant selection is an attractive feature because, even though Tanzanian and Kenyan counterparts would have been required to work together on ZTK, "it is helpful when people know each other. Joint coordination does not always happen as we would like. On ZTK, everything has been happening together."
- ➤ Participants on the Standard Gauge Railway from Uganda, Kenya, DRC and South Sudan have been networking with each other behind the scenes of formal regional technical committee meetings and there has been specific effort devoted to addressing human resourcing issues and inter-operability standards on a regional basis.
- Malawi has gained representation and participation into regional planning networks studying the respective feasibility of the Northern rail line and the Sena rail line from the port of Nacala into the interior land-locked countries beyond Malawi.
- Electrical engineers working for their respective national power utilities on the two sides of the Malawi-Zambia border have been coordinating closely so that Malawi's transmission line will be designed to meet the technical specifications for connection to the sub-station on the Zambian side of the border.

Meanwhile, IS4D participants working at the planning level on both sides of the border have been urging leadership in the two countries to sign two MOUs—one between the utilities and the other between the respective governments.

- ➤ Malawi and Tanzania share a border defined by a river. The two countries had long been having discussions between their water management authorities about developing power generation on this resource. Now, the corporate planners from the respective power utilities have gotten themselves included in cross-border discussions and have brought in technical harmonization considerations that had so far been overlooked.
- A Kenyan land economist working in the power sector has been studiously comparing the way-leave acquisition practices in Zambia, Uganda and Tanzania in order to propose improvements to the way Kenya approaches land use rights for power infrastructure. He reports having learned much from both road transport and power sector peers.
- Kenyan IS4D participants are actively involved in the development of a wheeling agreement whereby Tanzania will import power from Ethiopia across Kenyan transmission lines.

Evidence of Institutional Learning at Agency Level arising from Employee Participation in IS4D

Interviews with IS4D supervisors brought to light five examples of Agency level impact arising from IS4D participation by their employees:

- ➤ Kenya Electricity Transmission Company is reconsidering its way-leave acquisition policy as a result of comparative learning from other countries submitted by their Sr. Land Economist;
- They will be revising some aspects of their standard construction contracts as a result of risk management work contributed by their participating Civil Engineer;
- KETRACO intends to expand the scope of cross-border project planning meetings from technical harmonization issues alone to inclusion of project management harmonization in the future;
- ➤ Kenya Highways Authority expects to upgrade its risk management policies and procedures as a result of the WBP focus of one of their participants. Their intent is to expand their Enterprise Risk Management approach from one of liability reduction through insurance products to an emphasis on mitigation through early risk identification and prevention during project implementation.
- ➤ The Zambian Office for the Promotion of Private Power Investment (OPPPI) is witnessing an acceleration of progress on the ZTK project. As a result of the high density of corridor participants within IS4D, there is now much more cross-border communication between the technical engineers involved in procurement and construction along various segments of the line. Annex 3 depicts the density of IS4D participants working along this power corridor.

IS4D also has its own "learning objective" whereby the intention is to generate and document learning about the IS4D program model itself, including the Action Learning pedagogy. The purpose is to draw lessons that will improve future program delivery. Lessons captured on the program model during this quarter are presented in Annex 2 to the full report.

The next quarter will include many enrichment activities as each participant is given the opportunity to attend two of three choices—an experiential visit, a work-place immersion or attendance at training courses.

3. Introduction

The Infrastructure Skills for Development Activity (IS4D) was prepared during 2014 calendar year with funding of A\$2.5 million provided by the Australian Department of Foreign Affairs and Trade (DFAT) for design and implementation. During this period DFAT executed a partnership agreement with the NEPAD Planning and Coordinating Agency (NPCA) to implement the 9-month skills development program with the support of the Australia Africa Partnerships Facility (AAPF). Inception activities included joint travel by NPCA and AAPF representatives to West, East and Southern African regions to meet with agencies involved in delivering key regional infrastructure projects. Applications were invited from four corridors and, in the final analysis, a total of 38 participants were accepted into the program from 17 Agencies, representing 3 corridors in EAC, SADC, COMESA plus some peripheral African states.

The first quarter was devoted to design and delivery of an inception workshop for participants and the establishment of six Learning Sets, each facilitated by a designated mentor.

This quarter—April to June 2015-- concentrated on supporting IS4D participants to return to their jobs within their home agencies to begin applying upgraded project management skills being acquired on an on-going basis as they resumed their work responsibilities. As such, the quarter included the following key activities:

- Structured monthly meetings applying Action Learning methodology of the 6 Learning Sets whereby 2 or 3 participants present their work challenges each month and the mentor facilitates a discussion involving insightful questioning by the peer group to help the presenters formulate a plan of action for their way forward;
- Monthly one on one meetings between each participant and their mentor;
- Participant engagement in their respective Online Learning Modules moderated by Central Institute of Technology, including readings, participation in discussion groups through Blackboard technology and submission of evidence for assessment and progression through course milestones to gain competency in aspects of project management.
- ➤ IS4D management team also finalized Tripartite Learning Agreements between IS4D, participants and their supervisors and began the preparation of enrichment activities including short course design, experiential visits and work-based immersions catering to individual preferences.
- Finally, 'Home Visits' were conducted by a DFAT delegate and an IS4D team member to gain first-hand feedback on the IS4D program both from the perspective of participants and from that of their Agency managers or direct supervisors.

Descriptions of these activities along with insight into the challenges and breakthroughs experienced by IS4D participants to date are narrated in the body of this report.

4. Background

At up to \$50 billion per year, Africa's annual infrastructure financing gap is cutting growth of gross domestic product by about 2.2 per cent. The Africa Mining Vision articulates the importance of harnessing the continent's natural resource endowment as a means of accelerating economic growth, and it emphasises the critical role of infrastructure therein. Recognising the infrastructure deficit, African Heads of State approved an ambitious continent-wide Programme for Infrastructure Development for Africa (PIDA) in 2012, together with a Priority Action Plan to develop the key trade, transport, information and communications technology, power and water corridors with potential to integrate the continent. Australia's aid program in Africa

includes a focus on the extractives sector, to encourage the development of mineral wealth in a manner that favours good governance and inclusive economic opportunity. The NEPAD Planning and Coordinating Agency has oversight over PIDA. Together, DFAT and NPCA are sponsoring the Infrastructure Skills for Development program to build public-sector capacity to plan and oversee the delivery of priority PIDA infrastructure projects.

Lack of finance is only one cause of public infrastructure deficits in Africa. A more serious problem is the lack of public sector experience with complex regional projects requiring cross-border collaboration and institutional solutions. All IS4D participants have responsibilities pertaining to the delivery of priority regional projects and each will be supported through the program to enhance their skills in complex project management. The three stated objectives of IS4D are:

- 1. Improved design, packaging and implementation of priority regional public infrastructure projects in partner countries via improvements in key project management skills and capacities among selected public sector professionals;
- 2. Agencies working on PIDA PAP program delivery implement cross-border infrastructure projects more effectively through peer to peer practitioner networks that foster institutional learning;
- 3. Generate and document learning on the relevance, efficiency and effectiveness of the IS4D program model (including the *action-learning* pedagogy) in order to draw lessons that will improve future program delivery.

The first objective is essentially directed at building the project management competence of participating individuals. The second objective strives to ensure that peer group engagement and individual transference of learning within their work-place delivers an impact at Agency level to improve institutional competence to implement large scale infrastructure projects.

IS4D places emphasis on an Action Learning approach whereby participants will stay in their own jobs and, with the support of an assigned mentor and a peer Learning Set will apply new learning to problem solving on their own work-based project. The program is complemented by academic course material delivered via distance learning and other enrichment activities. The IS4D program consists of six distinct yet complementary learning elements so that participants have an overall learning experience that develops both technical and softer project management skills. The six elements are:

- 1. Work-Based Project (WBP): A participant-identified project relevant to PIDA infrastructure priorities to be completed in the workplace over 9 months
- 2. Mentoring: One-to-one relationship with a designated infrastructure specialist
- 3. Group Learning Set: Regular peer-to-peer discussions facilitated by the mentor
- 4. Experiential Visits: Exposure to a variety of stakeholders and alternative infrastructure models through travel or through immersion in the work place of another organisation
- 5. Customised Short-term Training: intensive, short-term skills training in topics of relevance
- 6. Project Management Curriculum: Online delivery of up to two project management training modules for which participants will receive Certificates of Attainment when successfully completed.

5. Activity Progress Quarter Two: April - June 2015

5.1 Project Oversight

During this quarter the IS4D management team devoted significant effort to supporting program participants and mentors through a variety of interventions. A "Tri-Partite Agreement" (TPA) had been sent to every participant's own supervisor during Q1 and these were pursued during Q2 to achieve 100% ratification. The

purpose of the TPA is to inform and engage all three parties—supervisors, participants and AAPF management—in their respective responsibilities under the IS4D program. Although this was a burdensome documentation and communications task, it was considered essential in order to establish a favourable foundation for transference of participant learning to Agency level impact. The home visits supplied clear evidence of supervisors taking an interest and following employee progress and justified the effort devoted. A number of examples where participants are exerting influence on their employers came to light and these are elaborated further below.

An IS4D web-page was established (http://www.aa-partnerships.org/is4d activity.asp?ID=265) and this now serves as the main communications tool between program sponsors and stakeholders. An extensive mailing list was compiled including NEPAD headquarters personnel and in-country focal points, DFAT personnel in Canberra and in-country posts, plus AfDB, DfID and USAID personnel, Agency supervisors and participants. Other parties can be identified and added to the distribution list as time goes on. This is used to send out periodic updates to IS4D stakeholders and interested parties. A reporting regime was established whereby CIT and mentors began reporting on a monthly basis and the oversight team began systematically aggregating and updating the WBP tracker which is posted on the web-site each month. In addition, IS4D management holds a phone or skype meeting with each mentor every month to identify any challenges and respond to suggestions that are made. ICT technology is an essential tool for the success of IS4D and is one area where there has been a need for flexibility, perseverance and patience on the part of mentors and participants alike. Oversight on this issue has continued to offer telephonic alternatives when IT reliance alone is not working.

A meeting between NEPAD, DFAT and AAPF was held at the end of the quarter to take stock of project progress and contemplate plans for the future. It was agreed that NEPAD will conduct an independent monitoring & evaluation trip to employing Agencies in order to gather their own impressions on how the program is responding to its two key development objectives. The AAPF M&E Advisor met with the NEPAD M&E Expert to review the project's M&E framework and provide NEPAD with the information needed to conduct an independent visit sometime before the final workshop in late October, 2015.

5.2 Monthly Learning Set Group Meetings

Although participants indicate that they are finding all elements of the program to be valuable and worthwhile, they generally rank peer networking as the most attractive element of the program. Consequently, they invest substantial time and effort at group meeting attendance. In those groups where two sub-sectors are blended (eg. power and roads or roads and rail), participants report that they learn from each other just as well as from same-sector peers because project management challenges are similar and relevant across infrastructure sectors. In group meetings, participants also gain value regardless of whether they are the presenter or whether they are listening to others' challenges. Even if their WBP is at a different stage within the project cycle, participants value hearing about others' challenges because it gives them an idea of what to anticipate within their own projects down the line.

Mentors have faithfully held monthly group meetings with their Learning Sets at pre-arranged times. Although it is rare for all members of any given group to attend and stay connected for a 2 to 3 hour group discussion, it is clear that the Action Learning format is being followed to the extent possible whereby 2 or 3 group members make a presentation and the mentor invites comment from the peers. Full attendance is obstructed by a number of factors, including poor bandwidth, last minute assignments imposed on participants, travel obligations and power cuts. Given these realities, the various groups have introduced a number of solutions to work around the disruptions. Some of them circulate presentations by email ahead of the meeting so that the entire group can familiarize themselves with the content before the discussion. Others post the content on shared Dropbox sites and several have established Whatsapp discussion groups

that they can use simultaneously or at any other point via their mobile phones. Even when bandwidth prevents some participants from being heard by the others, they nonetheless persevere and share their comments via written messaging over skype. The home visit interviews with participants recorded many examples of creative perseverance of this nature.

5.3 Monthly One-on-One Participant-Mentor Meetings & WBP progress

The monthly one-on-one meeting provides an opportunity for participant and mentor to take stock of the participant's progress or challenges with their work-based project, to support each one to develop greater professional insight into their own strengths, weaknesses and professional growth, and to ascertain any issues a participant may be having with the overall IS4D program. WBP progress reports are updated each month and available from the IS4D web-page. In aggregate, it is clear that 29 participants are progressing steadily against the milestones and objectives of their projects. Three are at or near completion with their WBP as it was defined at the outset. Two are experiencing delays outside their direct sphere of influence and are learning about the difficulties and frustrations of being in a beneficiary role on an aspect of project preparation (where a donor has funded and out-sourced a feasibility study to a third party) instead of being in the driver's seat. In three cases, IS4D participants are suffering from an abrupt cessation of their WBP brought about by specific circumstances:

- The decision of a subcontractor to rescind a construction contract due to a technicality of late payment by the contracting Agency;
- A decision made by higher management to vest responsibility for railway signalling design in the construction contractor;
- A decision made by the Tanzanian government to take on the preparation of the Dar es Salaam port by-pass road, effectively duplicating and nullifying the same work launched earlier by the regional infrastructure unit of the EAC Secretariat.

In each of these cases the mentors are nonetheless staying engaged with the participants to help them with a tidy exit process, to apply online learning to other tasks in an individual's portfolio or to help them re-invent the definition of their WBP. CIT has been very flexible in such situations to help participants adapt their course material and submissions of evidence to fit the reality of their context. There is one enrolled whose participation is quite erratic .

As an adjunct of the WBP—and separate from the academic modules on-line—each participant specified between 2 and 4 personal learning goals during the inception workshop to identify key skills they wished to improve. They self-rated their beginning skill level on a 1 to 5 scale where 1 = no skills, 3 = some skills and 5 = competence. The first Quarterly Report noted that participants had identified 29 different skill-sets of which the 9 most frequently cited corresponded to modules offered under the CIT Project Management diploma. During June meetings, participants were asked by their mentors to re-rate their skill level to see progress at the mid-point. Averaged across all categories, participants rated themselves as progressing in competence-now having a skill-level of 3.57, up 1.2 points or 51% from a self-assessed baseline of 2.37 at the outset. The table below shows the relative progress for the 9 most popular learning goals.

Table 1: Participant Perceptions of Progress: Self-Ratings Against Identified Learning Goals

Learning Goal	# Citing this Goal	Baseline Average	Mid-Point Average
Stakeholder engagement and	18	2.44	3.75
management			
Negotiation skills	12	2.42	3.32
Project Scheduling & Time	10	2.67	4.00
management			
Risk Identification, Mitigation and	9	2.00	3.17
Management			
Project Quality and Monitoring	9	2.80	3.50
Procurement management	8	2.5	3.625
Project evaluation, including review	8	2.00	3.19
& evaluation of consultant outputs			
Communications skills	7	2.71	4.25
Project governance and integration	7	2.57	3.21

5.4 Quarterly Progress in On-line Learning

Thirty-six participants are enrolled in two modules each of the Australian Project Management Diploma being delivered by CIT. Table 2 below identifies progress made over the quarter:

Table 2: Month by Month Progress in On-Line Module Completion

Progress Indicator	April	May	June
% of Student Contact during the month	86%	100%	53%
# of Candidates submitting >= 1 assignment	28	16	13
# of Assessment Tasks Received	49	30	25
# of Assessment Tasks assessed	45	30	18
# of Assessments recorded as "Demonstrated"	45	30	18
# of Assessments recorded as "Not Demonstrated"	0	0	0
# of Resubmissions required	0	0	0
Assessments still in process of being marked	4	0	7
# of Candidates preparing evidence for final portfolio	0	Several	Several
# of Candidates at risk of falling behind	Tracking 5	5	2

By the end of May, 32 candidates were up to date with their Assessment 1 tasks and 10 others had progressed to the stage of submitting evidence around their work-based project tasks. By the end of June, 2 students had not yet submitted a single assignment and are at risk of not completing the course material. This has brought to light the twin facts that (a) senior regional personnel have too great a work-load to be able to devote time to online learning, but (b) they have less need for exposure to the training material as they are already quite familiar with standard level project management skills. Twelve other students were contacted during June to request an alternative assessment submission plan that will suit their workload and schedule.

CIT has remained fully accessible to participants and has granted deadline extensions in a number of cases. Nonetheless, indications are that some participants are finding it difficult—not with the course content—but with their ability to make time for the on-line learning component of IS4D. This theme was borne out through participant interviews during home visits. The general feedback from participants was that

participants value the Project Management modules insofar as the content is highly relevant to them. Although the work load is high, they appreciate the immediate applicability of submitted assignments to their current work, so they don't resent the effort required. For example, several participants indicated that they would normally have a stakeholder engagement plan or a risk management plan loosely organized in their head, but by having to put it on paper for submission to CIT, they have taken a much more explicit and rigorous approach which has helped them improve their performance – both on their WBP and all of their other work.

5.5 Insights Gained from Home Visits

The IS4D Strategic Advisor and a representative of the Australian Department of Foreign Affairs and Trade visited 9 Agencies in 3 countries (Zambia, Kenya, 2 cities in Tanzania) during the period June 8 to 18 to meet with supervisors and IS4D participants within their home agency settings. One purpose was to follow up on operational matters and a second was to gain feedback on the design and utility of the IS4D program itself. NEPAD was invited to participate in the mission but was unable to join due to an Africa Union Summit taking place at the same time. Hence, as noted earlier, NEPAD will conduct an independent visit to home Agencies later during the program.

The itinerary of visits covered 9 of the 17 total Agencies sourcing employees into IS4D during this pilot phase. The delegation interviewed 17 participants and 13 supervisory managers. Of the latter, three were substitutes for other supervisors who were away on business and four were both participants and supervisors of more junior participants. Of the six direct non-enrolled supervisors, five were able to give clear evidence of following employee progress under the IS4D program. They were aware of their responsibilities under the Tripartite Learning Agreement (TLA) and two specifically expressed the view that this kind of commitment is valuable in order to extract reciprocal benefit. Three supervisors provided examples of how their Agency stands to gain from participation of their employees in the program. These included:

- The Director of Corporate Planning of Kenya Electricity Transmission Company (KETRACO) indicated that exposure to other models of way-leave acquisition by their Sr. Land Economist is now influencing KETRACO as an agency and causing them to revisit their policies. "At present, as part of our Resettlement Action Policy (RAP), we pay for a right of way which is a *use* of the land, but we do not pay for the *full value* of the land. ... our neighbouring countries approach way-leave acquisition through outright purchase [of a narrow corridor] so we have had a management retreat on this topic and are considering submitting the adoption of this practice to our Board."
- ➤ He also indicated that KETRACO will improve its contracting processes through an employee who made risk management a key learning goal under the program. Regrettably, a serious risk materialized under that participant's WBP which brought to light a weakness in the reporting hierarchy between the contracted Supervising Engineer versus the Construction Contractor under standard KETRACO contracts. In the future, KETRACO will improve their contracts to ensure that they are copied on inter-contractor correspondence so that the Agency is aware of lower level disputes and can take timely action to meet contractual obligations and protect their own contractual rights. Management believes their employee is getting good support from her mentor and from the online risk management module and they expect to the participant and her supervisor to help the company mainstream improved contracting and supervision processes the future.
- The other practice change that KETRACO is now considering pertains to the scope of inter-regional coordination at the planning stage. Although they periodically sit with colleagues from other national utilities to take a coordinated approach to technical issues (such as supply, load flow and customer

demand), they have not previously discussed issues of project management for implementation. They now think the harmonization of project management approaches is a topic to bring systematically into cross-border planning discussions.

- ➤ The Director of R&D and Corporate Planning at Kenya Highways Authority (KenHA) made it clear that his nomination of one IS4D participant was for the express purpose of expanding Agency awareness over the range of risks that the Agency encounters during road project implementation in order to develop more comprehensive risk management policies and procedures. Although KenHA has an Enterprise Risk Management plan, it focuses somewhat narrowly on mitigation instruments such as insurance whereas he hopes to influence the Agency to place more emphasis upon risk identification and prevention.
- The Zambian Office for the Promotion of Private Power Investment (OPPPI) is witnessing an acceleration of progress on the ZTK project. As a result of the high density of corridor participants within IS4D, there is now much more cross-border communication between the technical engineers involved in procurement and construction along various segments of the line. These include the link to take place at the Namanga border between Kenya and Tanzania, the one between the Tanzania and Zambia, and also the one that will enable a Zambian extension to Malawi. The OPPPI participant within IS4D observes many cross border discussions of this nature taking place among IS4D peers that will benefit OPPPI's responsibilities in facilitating the ZTK Project Management Unit at large. Annex 3 presents a diagram that reflects the density of cross-border PIDA power sector participation currently fostered through IS4D.

In addition, three supervisors expressed specific satisfaction that their employees were demonstrating the acquisition of new or improved project management skills. Three made mention of the fact that the IS4D learning model fits their needs for staff development insofar as the emphasis is on applied learning which keeps employees focused on their daily jobs and is very practical by nature. Four supervisors expressed great appreciation that the cross-border relationships forged or enhanced through IS4D are improving communications and making participation in regional projects easier. These various conversations led five supervisors to make specific requests for admission of more of their personnel into a next phase of the program, should that come to pass. The topic of IS4D graduates "giving back" to their employers in some way was also raised with supervisors. There was enthusiastic endorsement of the idea that employees should come to the final IS4D workshop with a proposal on how they will share their learning with their home Agency upon graduation and return to work.

The interviews with participants also yielded insights into the relevance and utility of the IS4D program model. Participants were routinely asked to comment on the four program elements that they had experienced to date—inception workshop, peer group involvement, one-on-one mentoring or online learning. Most participants resisted the notion of ranking the components, insisting that all have been useful to date, but if pushed, they cited peer networking as the most attractive element of IS4D. Other notable observations arising from participant interviews include the following:

Many participants noted that the PM modules require a substantial time investment but some indicated that they will do the assignments at home on their own time if that is what it takes to complete them. Others indicated that they appreciate CIT flexibility in re-negotiating deadlines. Several still want to continue with the rest of the PM modules after completion of IS4D in order to gain the Project Management Diploma, but they agree that they could not expand to absorb more in the current time frame. (IS4D will explore with CIT what might be possible for continued, self or Agency-paid studies after program completion and this will be reported at the final workshop.)

- Most participants indicated that they are multi-tasking on a variety of assigned tasks, and though they are advancing their IS4D-specific WBP, they are also applying their learning to the rest of their respective portfolios.
- There is a high level of appreciation by participants of their mentors and evidence that mentors are applying the action learning approach.
- Several examples of cross-border collaboration came to light. These are highlighted within the Executive Summary to this report.

6. Lessons Learned During Second Quarter Implementation

This section documents lessons learned about the IS4D model observed during the second quarter of implementation. These are cumulated with those arising from the inception workshop and reported in Annex 3.

- Targeting and careful selection of participants along with Learning Set composition has made an important contribution to the effectiveness of the peer component and its apparent capacity to deliver synergies among them.
- 2. It has become clear that senior personnel with substantial travel and regional responsibilities have substantial workload pressures, making it difficult to accommodate much attention to IS4D.
- 3. To reinforce Agency-level impacts upon participants' return to work it makes sense to encourage "graduating" participants to return to their work-place with a specific proposal on how they propose to give back to their own Agency (eg. by submitting proposals around new policy, drafting procedural guidelines, offering an internal workshop to share knowledge, or the like.) This will be built into the format of the final workshop and, to be most effective, it would make sense for NEPAD/ISDF to incorporate follow-up on this initiative in a next phase of "Home visits" in order to further evaluate the degree of Agency level impact achieved by IS4D.
- 4. There are a variety of refinements to the IS4D model to consider for the future to reinforce the 'on-the-job' feature of IS4D while achieving a sensible balance between core work and IS4D learning responsibilities. For example: It may be preferable to avoid recruiting highly senior personnel who have too many travel and work-related responsibilities; it might be appropriate to reduce the number of enrichment activities and corresponding travel obligations on participants and/or consider reducing the online enrolment to one module per participant in the future. These attributes of the IS4D model will be tested through end-of-program surveys at the final workshop.

7. Next Steps

The following quarter will be exceedingly busy for participants as they continue the rhythm of monthly group and one-on-one meetings, but also travel to engage in their two enrichment choices—whether experiential visits, work-place immersions or attendance at any of three customised training courses. In addition, they will need to keep up with their online learning modules and those who are behind will need to accelerate progress if they wish to successfully complete the material.

The month of July will include:

- > Impala Group Experiential Visit to Tanzania
- Work Based Immersion ZESCO Zambia
- Work Based Immersion to Grid Co Ghana
- ➤ Eagle and Rhino Group Experiential Visit to South Africa
- Work Based Immersion SAPP Zimbabwe
- Customised Training course on Financing Options for Infrastructure Zambia
- Kudu Group Experiential Visit to Namibia

The months of August and September will include:

- Customised Training course on Negotiation Skills
- Customised Training course on Leadership Managing Across Boundaries
- Work Based Immersion ESKOM—South Africa

The entire team is looking forward to another successful quarter of infrastructure skills development.

Annex 1 – Statistical Annex: Reporting against M&E Indicators

Objective 1: Improved design and packaging of priority regional public infrastructure projects in partner countries via improvement in key project management skills and capacities of participants.

Output # 1: Learning Goals agreed between Mentors and Participants: Number and % concluded.

38 Learning Agreements (LAs) were concluded between mentors and participants—100% of total cohort.

Output # 2: Number of participants reporting progress against an agreed Learning Goal:

All but one participant is reporting progress on a regular basis against WB Learning Goals and the aggregate improvement between baseline and mid-point is a 51% average gain in self-assessed competency.

Output # 3: Work-Based Projects agreed between Mentors and Participants: Number and % concluded

38 WBPs agreed (100%) and documented.

Output # 4: Participants requiring a modification to their Work Based Projects: Number and % 1WBP for a South Sudanese participant was fine-tuned after return to post and duties accepted for cross-support to two non-English speaking S.S. participants. 3 participants have experienced serious disruptions to their WBPs arising from events outside their control. Nonetheless, they continue to stay engaged in other elements of the program, including mentoring, peer group engagement, online learning and upcoming enrichment activities.

Output # 5: Participants meeting a documented interim Work Based Project Milestone: Number

32 of 38 participants have reported progress against WBP milestones.

Output # 6: Data on participant enrolment in PM online modules

Project Management Unit Title	Number of enrolments
Manage project integration	25
Manage stakeholder engagement	15
Manage project risk	11
Manage project time	7
Manage project quality	4
Manage project governance	3
Manage project information and communication	3
Manage project procurement	2
Manage project scope	1
Manage project human resources	1

Output #7: Scores from baseline Training Needs Analyses for online Project Mgm't Modules

TNA scores were reported by CIT for 26 participants on the 52 PM modules in which they have enrolled. Specific TNA scores were not available for 10 participants on the 20 PM modules in which they enrolled but alternative qualitative data was collected so CIT will be able to measure progress as against their baseline.

Project Management Unit Title	Average Baseline Competency
Manage project integration	3.25
Manage stakeholder engagement	3.2
Manage project risk	2.27
Manage project time	2
Manage project quality	2
Manage project governance	4
Manage project information and communication	2.5
Manage project procurement	5
Manage project scope	1
Manage project human resources	2

Output #8: Monthly progress data pertaining to online Project Mgm't Modules

Statistics with respect to online learning progress is depicted below:

Progress Indicator	April	May	June
% of Student Contact during the month	86%	100%	53%
# of Candidates submitting >= 1 assignment	28	16	13
# of Assessment Tasks Received	49	30	25
# of Assessment Tasks assessed	45	30	18
# of Assessments recorded as "Demonstrated"	45	30	18
# of Assessments recorded as "Not Demonstrated"	0	0	0
# of Resubmissions required	0	0	0
Assessments still in process of being marked	4	0	7
# of Candidates preparing evidence for final portfolio	0	Several	Several
# of Candidates at risk of falling behind	Tracking 5	5	2

Output # 9: Tripartite Agreements executed with Agency supervisors' signatures: % concluded By end of Q 1, 24 Tripartite Learning Agreements had been executed with Agency supervisor's signature, 63% concluded. By end of Q 2, 100% of TLAs had been concluded between AAPF and Agency supervisors.

Output # 10: Mentor & participant Communication strategies operationalized and working effectively

Mentor & participant communication strategies have been operationalized and several work-around solutions have been developed to overcome ICT challenges.

Objective # 2: Agencies working on PIDA Priority Action Plan program delivery more effectively implement cross-border infrastructure projects through peer to peer practitioner networks that foster institutional learning.

Output # 11: Qualitative stories of peer learning—including WBP cross-learning and incidents of collaboration or cross-border lessons-- reported by mentors from monthly learning group sessions and garnered through Home Visits.

Participants interviewed during home visits indicate that they are finding all elements of the program to be valuable and worth the time invested. While they were generally reluctant to rank the program

components, there was consistent feedback that they view the peer networking as the most attractive element of the program. Several groups have, on their own initiative, established mobile connectivity using the Whatsapp app and they frequently consult each other about work-place challenges or online learning assignments in between formal meetings. Mentors report a high degree of cohesion within their Learning Set groups.

- ➤ Participants from multi-sector learning sets report that they learn from each other just as well as from same-sector peers because project management challenges are similar and relevant across sub-sectors. For example, a Kenyan road engineer gleaned some useful insights from power sector peers on conflict mitigation approaches with angry community members. He also took advice from Uganda peers on better ways to deal with detection of defects prior to accepting a construction contractor's work. An engineer with Kenya Railways Corporation reported gaining useful insight from a Ugandan road engineer on how to deal with material quantities estimations and oversight of contractor labor.
- In group meetings, participants also gain value regardless of whether they are the presenter or whether they are listening to others' challenges. Even if their WBP is at a different stage within the project cycle, participants like hearing about others' challenges because it gives them an idea of what to anticipate within their own projects down the line.

Evidence of Cross-Border Collaboration Arising through IS4D Networks

- Kenya and Tanzania have formed a joint technical committee for the preparation of construction on their respective national transmission lines that will connect at the border. Two IS4D participants have worked jointly to produce harmonized tender documentation for construction contractors and have jointly short-listed and held pre-bid briefing sessions with six short-listed contractors. TANESCO's Deputy Managing Director of Investment told the home visits delegation that the cross-border nature of IS4D participant selection is an attractive feature because, even though Tanzanian and Kenyan counterparts would have been required to work together on ZTK, "it is helpful when people know each other. Joint coordination does not always happen as we would like. On ZTK, everything has been happening together."
- Participants on the Standard Gauge Railway from Uganda, Kenya, DRC and South Sudan have been networking with each other behind the scenes of formal regional technical committee meetings and there has been specific effort devoted to addressing human resourcing issues and inter-operability standards on a regional basis.
- Malawi has gained representation and participation into regional planning networks studying the respective feasibility of the Northern rail line and the Sena rail line from the port of Nacala into the interior land-locked countries beyond Malawi.
- Electrical engineers working for their respective national power utilities on the two sides of the Malawi-Zambia border have been coordinating closely so that Malawi's transmission line will be designed to meet the technical specifications for connection to the sub-station on the Zambian side of the border. Meanwhile, IS4D participants working at the planning level on both sides of the border have been urging leadership in the two countries to sign two MOUs—one between the utilities and the other between the respective governments.
- Malawi and Tanzania share a border defined by a river. The two countries had long been having discussions between their water management authorities about developing power generation on this resource. Now, the corporate planners from the respective power utilities have gotten themselves

included in cross-border discussions and have brought in technical harmonization considerations that had so far been overlooked.

- A Kenyan land economist working in the power sector has been studiously comparing the way-leave acquisition practices in Zambia, Uganda and Tanzania in order to propose improvements to the way Kenya approaches land use rights for power infrastructure. He reports having learned much from both road transport and power sector peers.
- ➤ Kenyan IS4D participants are actively involved in the development of a wheeling agreement whereby Tanzania will import power from Ethiopia across Kenyan transmission lines.

Evidence of Institutional Learning at Agency Level arising from Employee Participation in IS4D

Interviews with IS4D supervisors brought to light five examples of Agency level impact arising from IS4D participation by their employees:

- Kenya Electricity Transmission Company is reconsidering its way-leave acquisition policy as a result of comparative learning from other countries submitted by their Sr. Land Economist;
- They will be revising some aspects of their standard construction contracts as a result of risk management work contributed by their participating Civil Engineer;
- ➤ KETRACO intends to expand the scope of cross-border project planning meetings from technical harmonization issues alone to inclusion of project management harmonization in the future;
- ➤ Kenya Highways Authority expects to upgrade its risk management policies and procedures as a result of the WBP focus of one of their participants. Their intent is to expand their Enterprise Risk Management approach from one of liability reduction through insurance products to an emphasis on mitigation through early risk identification and prevention during project implementation.
- ➤ The Zambian Office for the Promotion of Private Power Investment (OPPPI) is witnessing an acceleration of progress on the ZTK project. As a result of the high density of corridor participants within IS4D, there is now much more cross-border communication between the technical engineers involved in procurement and construction along various segments of the line. Annex 3 depicts the density of IS4D participants working along this power corridor.

Output # 12: Evidence of student collaboration and networking as reported by Australian Registered Training Organisation—CIT

CIT has begun a discussion blackboard on topics of common interest, particularly around project integration. There has been robust participation by participants in this forum.

Output # 13: Examples of NEPAD involvement and value added in supporting mentors or participants of IS4D programs.

NEPAD Power Sector expert was helpful in making introductions between IS4D mentor and West African hosts for Work Immersion within Ghana Gridco as an enrichment activity for IS4D participant.

Objective # 3: Generate and document learning on the relevance, efficiency and effectiveness of the IS4D program model (including the action-learning pedagogy) in order to draw lessons that will improve future program delivery.

Output # 14: Lessons Learned identified and documented from the Learning Goals process.

A survey was conducted at the end of the Kick-Off Workshop and lessons were drawn about workshop organization and the overall documentation burden pertaining to Learning Agreements. These have been written up and circulated to DFAT and NEPAD. This topic shall be revisited with respect to the WBL goals at the end of the program. In addition, Annex 2 reports cumulative lessons learned from IS4D to date.

Output # 15: Lessons learned identified and documented from the WBP process.

Additional lessons on the relevance and utility of the IS4D model were culled during the Second Quarter and these are reflected in Annex 2.

Output # 16: Lessons learned identified and documented from the online learning process.

It is clear that the work load and time investment required by online learning is substantial and CIT has had to remain quite flexible and willing to renegotiate deadlines for assignment submission. This topic shall be revisited at the end of the program.

Output # 17: Psychographic data on IS4D applicants collected.

A total of 55 applications (including 9 women) were received from 8 countries. We observed that a higher number of applicants responded from countries that were visited in person. Where IS4D team members did not visit, countries had a tendency to nominate only the number that would eventually be admitted which did not enable us to apply a competitive sieve in order to maintain cohort intake with good national diversity.

Output # 18: Psychographic data on IS4D enrolled participants collected.

Although forty applicants were accepted, two from Rwanda had to drop out due to lack of travel permission; hence 38 participants were eventually enrolled. This cohort included 7 women and 31 men from Democratic Republic of Congo, Kenya, Malawi, South Sudan, Tanzania, Uganda, Zambia. Regional Economic Communities represented included IGAD, EAC, COMESA and SADC.

Output # 19: Number of mentors hired and their relative sector expertise.

Twelve individuals applied for the role of ISAD mentor. Six were eventually hired. Selection criteria focused both upon prior mentoring experience or "disposition" and infrastructure expertise. Of those selected, two were self-declared experts in rail transport, two were self-declared experts in power, one was a self-declared expert in energy and climate change and one was a self-declared expert in port transport and civil engineering. The original intention had been to hire experts with the same range of sub-sector expertise in infrastructure to match perfectly with the sector orientation of the incoming cohort (power vs. rail vs. roads). We also sought infrastructure experience gained in Africa. In actual fact, it was not possible to work out the perfect sub-sector "match" but this was mitigated by the fact that most mentors actually had project management experience across a broader range of infrastructure sectors. The initial workshop clarified that the Action Learning methodology—if correctly applied—does not require the deep subject-matter knowledge of an experienced sector practitioner as we had expected. African experience and a mentoring "disposition" are both important. However, during Home Visits participants were asked their views on whether mentors

should be infrastructure experts in order to be effective. The consensus was affirmative because they can better relate to the problems and challenges arising and they know better what thought-provoking questions to ask. IS4D managers have further observed the importance of mentors having African networks in relevant infrastructure sectors in order to be able to organize experiential visits. If IS4D is to be replicated, one might consider establishing a mentor "panel" to draw upon over time for repeated intake cohorts.

Output # 20: Learning set composition—Agency, sector, nationality and gender blend.

The IS4D cohort originates from 18 Agencies in 7 countries and includes 7 women and 31 men hailing from rail, road and power sectors. Composition of the learning sets was a challenging task because of the need to balance diversity on the one hand (gender, nationality, experience level) with common interests among the cohort on the other hand. A great deal of thought was put into this process, based principally upon the participants' initial proposals for their work based project interests. The table below presents the resulting Learning Set composition.

Group Name:	Impalas	Rhinos	Kudus	Lions	Elephants	Eagles
# in SET	6	6	7	6	7	6
# Roads	1	2		2	2	5
# Rail	5	4				1
# Power			7	4	5	
# Female	1	1	2	1	1	1
# Male	5	5	5	5	6	5
# Corridors	2	2	1	2	2	2
# Senior	5	1	0	2	5	2
# Junior	1	5	7	4	2	4
Regional	2	0	1	1	0	3
DRC					1	2
Kenya	2	1	2	3	2	3
Malawi	1	1	1		1	
South Sudan	1	3				
Tanzania			2	1	1	
Uganda	2	1		1	0	1
Zambia			2	1	2	

Annex 2 - Cumulative Record of Lessons Learned on the IS4D Program Model

Lessons from Quarter 1

- 1. In future cohorts it would be beneficial to split the mentor training component (on Action Learning methodology) from the inception workshop. Having the two back to back was very intense and tiring for the mentors. Providing a lapse of time between the two would allow greater opportunity for the mentors to practice their new skills in action learning facilitation before meeting their mentees. This would make it more expensive however- two trips rather than 1 trip. At the same time, the workshop clearly demonstrated the value of having an Action Learning specialist at hand.
- 2. Review the nomination form to capture issues such as language. The current nomination form did not screen the Arabic speaking South Sudanese participants.
- **3.** Consider procuring a large panel of mentors that could be accessed over a multi-year period and deployed into successive cohorts as appropriate to the constituents' sub-sector needs when each one commences. Another suggestion is to consider enlisting some of the current mentees as mentors for future cohorts.
- **4.** Prepare a complete pack of initial paper work that each mentee would need to complete through the course of the inception workshop and provide this to them as one package at the start of the workshop rather than sequentially as the orientation progresses.
- 5. The inception workshop should be slightly longer than 8 working days and should provide the weekend off for the participants. This is so that sufficient time is allowed for mentors and mentees to establish relationships but also because participants need to rest.
- 6. Provide more time for participants to spend networking among themselves during core working hours (not just dinners) at future events. Similarly, provide more time for mentors and IS4D program managers to interact and exchange ideas with each other (while participants are networking) so it does not have to be crammed into sessions at the end of busy days.
- 7. Although the original design principles of offering a high degree of customisation for each individual participant was applied in this phase, it would be more practical in the future to pre-identify and procure a set range of choices for customised training. It remains to be seen how well mentors get on with arranging tailored experiential visits and work-place immersion opportunities, but it could be that these options should also be pre-arranged for future cohorts. The recruitment effort was too labor intensive to permit this kind of pre-arrangement for the current pilot, but if the program is repeated, elements like these are worth reconsidering.

Lessons from Quarter 2

- **8.** Targeting and careful selection of participants has made an important contribution to the effectiveness of the peer component and its apparent capacity to deliver synergies among them.
- **9.** Participant selection criteria should focus more on a candidate's role and responsibility within their employing Agency rather than job title or academic qualifications.
- **10.** The advantage of having two participants per Agency is evident from the bonding and collaborative support they get from each other. The blending of senior with junior personnel is also proving effective.
- 11. It has become clear that senior personnel with regional responsibilities have substantial workload pressures, making it difficult to accommodate much attention to IS4D.
- 12. To reinforce Agency-level impacts upon participants' return to work it makes sense to encourage "graduating" participants to return to their work-place with a specific proposal on how they propose to give back to their own Agency (eg. by submitting proposals around new policy, drafting procedural guidelines, offering an internal workshop to share knowledge, or the like.) This will be built into the format of the final workshop and, to be most effective, it would make sense for NEPAD/ISDF to

- incorporate follow-up on this initiative in a next phase of "Home visits" in order to further evaluate the degree of Agency level impact achieved by IS4D.
- 13. There are a variety of refinements to the IS4D model to consider for the future to reinforce the 'on-the-job' feature of IS4D while achieving a sensible balance between core work and IS4D learning responsibilities. For example: It may be preferable to avoid recruiting highly senior personnel who have too many travel and work-related responsibilities; it might be appropriate to reduce the number of enrichment activities and corresponding travel obligations on participants and/or consider reducing the online enrolment to one module per participant in the future. These attributes of the IS4D model will be tested through end-of-program surveys at the final workshop.
- **14.** During home visits the delegation asked for participant views on whether mentors should be experts in infrastructure in order to be effective. The consensus was affirmative because they can better relate to the problems and challenges arising and they know better what thought-provoking questions to ask.
- **15.** One aspect of participant demand which was not fully anticipated at design stage was the degree of interest in public sector immersions. Although the original intention was to offer work place immersions in private companies for the most part, the majority of immersions have ended up being within other public sector institutions. Nonetheless, the learning from such immersions appears to be quite relevant.

Annex 3: Depiction of Cross-Border Collaboration among Power Sector IS4D Participants

