



FINAL NARRATIVE REPORT IRFFI/UNDG IRAQ TRUST FUND (UNDG ITF)

Participating UN Organization(s)

(if joint programme, indicate the lead agency) UN-ESCWA, UNESCO

Sector(s)/Area(s)/Theme(s)

Cluster B: Education and Culture

Programme/Project Title

Iraqi Networking Academy Project - Phase IIa

Programme/Project Number

B1-17 (*second phase for B1-10*)

Programme/Project Budget			Programme/Project Location			
UNDG ITF: \$3,780,000 (requested and approved)	USD		Region (s):	Throughout Iraq		
Govt. Contribution: \$430,000 (in kind)	USD		Governorate(s):	Baghdad, Mosul, Basra and Erbil		
Agency Core: Other: (Cisco): \$373,000 (in kind)			District(s)	Districts around the four major cities for 39 Local Academies.		
TOTAL <u>Phase II</u> : \$4,210,000	USD					

Final Programme/ Project Evaluation

Evaluation Done Yes No **Evaluation Report Attached** Yes No

Programme/Project Timeline/Duration

Overall Duration

33 months, 29 Sep 05 – 30 Jun 08

Original Duration

24 months, Sep 05 – Aug 07

Programme/ Project Extensions

Project extended to 30 June 2008 (three-month internal extension and six-month extension approved by UNAMI)

Report Formatting Instructions:

- Number all sections and paragraphs as indicated below.
- Format the entire document using the following font: 12point _ Times New Roman & do not use colours.

FINAL NARRATIVE REPORT

I. PURPOSE

a. Provide a brief introduction to the programme/ project (*one paragraph*)

The Iraqi Networking Academies Project (INA) Part II is a UNDG-ITF funded project, which started in September 2005, just after the completion of INA, and ended in June 2008. INA Part II is a follow-up project to the initial INA project. Networking academies are learning centres for Cisco educational courses: the Cisco Networking Academy Program (CNAP) provides students with internationally recognized certifications, such as the Cisco Certified Network Associate (CCNA) and IT Essentials. The main goal of this project is to establish one Regional Networking Academy (RNA) in Erbil. Along with the 4 RNAs established in the INA project, each of these RNAs is responsible for establishing a specified number of Local Networking Academies (LNAs) in several universities, colleges, and training institutions. The total planned number of local academies is 39, distributed throughout Iraq, 6 of which were established in the INA project. The Academies are expected to graduate 50 Cisco Certified Networking Associate (CCNA) instructors and 1,500 CCNA students every year.

b. List programme/project outcomes and associated outputs as per the approved Project Document.

Outcomes:

- Provide students in Iraqi universities and technical institutions with internationally accredited networking education;
- The project will directly contribute to the restoration of the ICT education system in Iraq;
- The project will provide a link between the programme graduates and the Iraqi job market through the Cisco Alumni.

Associated Outputs:

- Establish 1 RNA in 1 major university in the Kurdish region of Iraq;
- Support the 5 Regional Academies (4 from the INA Project, and 1 from this project) to complete the establishment of 33 LNAs for a total of 39 LNAs between INA and INA Phase II (revised down from 50 LNAs; however the total number of academies was kept at 44 this revision is not reflected in the project document);
- Establish Internet connections of academies to appropriate ISPs (the universities sponsored the internet connections)
- Enrol, train and graduate 30 students from each Local Academy each year when the system is fully operational
- c. List the UN Assistance Strategy Outcomes, MDGs, Iraq NDS Priorities, ICI benchmarks relevant to the programme/ project

This project directly addresses the issues of education, higher education, job opportunity and creation, promoting gender equality and building partnerships. This project also indirectly supports capacity building for developing applications that target health, environment, and better life quality. These are all part of the Millennium Development Goals (MDG). These issues are also a part of the mandates of the partners involved (ESCWA and UNESCO).

Also, education and higher education are priority sectors in the UN Assistance Strategy to Iraq,

the National Development Strategy of Iraq, and the Millennium Development Goals, and are included in the work plans of Cluster 1, in which ESCWA is a participating agency.

d. List primary implementing partners and stakeholders including key beneficiaries.

Primary Implementing Partners:

- Iraqi counterparts (Ministry of Higher Education, University of Baghdad, University of Basra, University of Mosul and Mansour University College)
- Lebanese American University (LAU)
- UNESCO
- Cisco
- ESCWA

Key Beneficiaries:

- Iraqi schools, colleges, universities, technical institutions, and departments of engineering and computer science
- Internet Centers
- The Iraqi ICT sector
- Iraqi students and teachers

In addition, the general public and the Iraqi economy will benefit from the project. The Ministry of Higher Education and Iraqi universities participated in the formulation, implementation, and running of the first phase of the project, and continued to do so in the second phase.

II. ASSESSMENT OF PROGRAMME/ PROJECT RESULTS

a. Report on the key outputs achieved and explain any variance in achieved versus planned results. Who have been the primary beneficiaries and how they were engaged in the programme/ project implementation?

Key outputs achieved:

- Establishment of 1 RNA: 1 RNA was established in 1 major university in the Kurdish region of Iraq. All equipment required to build the RNAs and LNAs has been purchased and delivered to the RNAs.
- Establishment of LNAs: 18 out of the 33 planned LNAs were established (24 in total for INA and INA Phase II, out of the 39 planned in total), as of 30 June 2008. This discrepancy is due to the living conditions in the surroundings of the initially planned locations of the academies. As soon as the situation permits, the RNAs will complete establishing the remaining LNAs.
- <u>Establishment of internet connections:</u> all planned internet connections of the academies to appropriate ISPs were established.
- Training of instructors and students in Iraq: This is an ongoing activity. Instructors are training at the RNAs, while students are trained at the LNAs. The Academies were expected to graduate 1,500 Cisco Certified Networking Associate CCNA students every year. In the 33 month duration of this project, only 1,260 students were fully trained in one of the components (after a 27% drop-out rate from 1,732 enrolments). This variance is due to several restrictions: not all academies were established, established academies were not ready to accommodate the number of students, and the socio-economic situation did not allow the full achievement of the target.

Primary Beneficiaries and their engagement in the project implementation:

The direct beneficiaries for this project are students in Iraqi universities and technical institutions who will make use of the knowledge learned through the Cisco networking courses given at the local networking academies to increase their ICT skills. These students' engagement consisted mostly of their participation in the classes and interaction with the instructors and the Cisco students' network. The indirect and long term beneficiary is Iraq's ICT and Education sector: these students, once graduated with the different Cisco certificates over the coming years, will form a substantial asset to Iraq, allowing them to find jobs in the Iraqi ICT sector and support enterprise ICT infrastructures in the government and private sectors.

b. Report on how achieved outputs have contributed to the achievement of the outcomes and explain any variance in actual versus planned contributions to the outcomes. Highlight any institutional and/or behavioural changes amongst beneficiaries at the outcome level

This project is the follow-up to the INA project; therefore the achievements of the outcomes can only be fully identified when considering both projects together. The networking academies system, when fully operational, is planned to train and graduate approximatly1,500 Iraqis each year who are expected to be highly skilled in up-to-date Information and Communication Technologies, and hence contribute to solving some of the constraints mentioned above, which is essential for the progress and development in Iraq.

Thus far, the achieved outputs, namely the 5 RNAs and 24 LNAs established and provided with internet connections to the appropriate ISPs, as well as the enrollment and graduation of 1,732 and 1,260, respectively, will directly contribute to the outcome by providing the Iraqi people the opportunity to receive Networking education and thus empower them to actively contribute to the rebuilding and development process of their country. This, in turn, will directly contribute to the restoration of the ICT education system in Iraq, and is aimed to address areas of urgent need.

On a more specific level, the project has already contributed to capacity building by training trainers in the four universities to enable them to train instructors in the local academies. Further capacity building activities took place, including newly selected resources as well as upgrading skills of some of the staff that had undergone training during the first phase.

The variances in actual versus planned contributions to the outcomes are due to several factors, which are highly dependent on the socio-economic and security situations in Iraq:

- The variance in the number of LNAs established is due to the living conditions in the surroundings of the initially planned locations of the academies. As soon as the situation permits, the RNAs will complete establishing the remaining LNAs.
- The variance in the number of students enrolled and graduated is due to several restrictions: not all planned academies were established, established academies were not ready to accommodate the number of students, and the socio-economic situation did not allow the full achievement of the target.
- c. Explain the overall contribution of the programme/ project/ to the ICI, NDS, MDGs and Iraq UN Assistance Strategy.

Education and higher education are priority sectors in the UN Assistance Strategy to Iraq, the National Development Strategy of Iraq, and the Millennium Development Goals, and are included in the work plans of Cluster 1, in which ESCWA is a participating agency.

This project directly addresses the issues of education, job opportunity and creation, promoting gender and building partnerships. This project also indirectly supports capacity building for developing applications that target health, environment, and better life quality. These are all part of the Millennium Development Goals (MDG). The partners involved (ESCWA and UNESCO)

also have these issues as part of their mandates.

Finally, in returning to full enrolment, Iraq would be meeting its Human Rights commitments and the targets set by the international community in the 'Education for All' Declaration.

- d. Explain the contribution of key partnerships including national, international, inter-UN agency, CSO or others towards achievement of programme/ project results.
- Iraqi counterparts (Ministry of Higher Education and Scientific Research, University of Baghdad, University of Basra, University of Mosul and Mansour University College) are responsible for site preparation, provision of common facilities and payment of salaries and allowances of the staff of the academies. They are also responsible for training the trainers in the Local Academies:
- Lebanese American University (LAU) provided the initial training of staff members from the four universities. It has also provided advisory support to the project team, as well as to the staff from the four universities that were trained at the RNA in the LAU campus;
- Cisco is one of the world leaders in networking technology, and provides education in different aspects of networking, through the Cisco Networking Academy Program (CNAP), which is adopted in all project academies;
- ESCWA provided the total project management and overseeing the procurement, selection, installation and proper running of the hardware/software and other supporting services;
- UNESCO provided background information on the state of the education sector in Iraq.

The successful partnership of UN-ESCWA with the Iraqi Ministry of Higher Education and Scientific Research (MOHESR), Cisco and the Lebanese American University (LAU) is a success story in the process of rehabilitating the education systems of countries in conflict.

- e. Highlight the contribution of the programme/ project on cross-cutting issues:
 - Were the needs of particularly vulnerable or marginalised groups addressed?

The academies that have been established in INA and INA Phase II cover all provinces of Iraq. Many of these provinces were neglected during the last three decades. The CNAP stipulates a non-profit making approach to networking training. The Quality Assurance Programme (QAP) of Cisco gives preferential incentives to disabled and marginalized groups to participate in the CNAP. Furthermore ICT jobs are known to be professionally friendly to disabled persons and offer many aid tools and gadgets to aid such groups. Furthermore, the hosting institutions to these academies are universities that have clear policies of non-discrimination and comply with international rules and laws that the new government of Iraq is anxious to abide to. The project specifically encourages universal access to information, as it enables the dissemination of networking technology and information sharing through the Internet and other networks that may be in place in the Iraqi society in the near future. As a consequence, the project will enable the Iraqi people to access global and national information in a more transparent manner, thus creating a friendly and enabling environment for good governance and propagation of a human rights culture.

• How did men and women benefit from the programme/project? How were gender inequalities handled?

The Iraqi higher education offer equal opportunities to both men and women. IT courses, in particular, are traditionally known to have more female than male students in most universities in Iraq. In many IT centres in government institutions, as well as professionals in the private sector, women represent a good share of the staff. In addition, CNAP emphasises this issue through the monitoring process it follows to ensure gender equality at all levels of the programme. The project

team insisted that, as much as the situation in Iraq permits, women should be present in all student and instructor classes. Furthermore, women have actively participated in the initial training-of-trainers session which took place in August 2004 in the Lebanese American University in Byblos. The latest statistics from Cisco give the breakdown of male/female participation in the courses: out of all enrolled students, 23% are women. Although extra efforts are exerted in order to insure women participation in the courses, the security situation doesn't make this task easier.

• Were environmental concerns addressed including environmental impact/risk assessment where relevant?

ICT is usually considered as an environmentally friendly industry. Many of its components are produced in a manner to avoid pollution and encourage recycling.

- Were there any specific issues in relation to the security situation?
- As the academies are going to be located within campus of existing universities and other learning institutions, the issue of security will become part of the security issue of the hosting institution and thus enjoy the same security considerations as the host. Each specific academy will also be encouraged to take additional security measures as found appropriate to ensure the safe running of its activities. The project coordinator will provide advice to each academy in due course.
- However, the security situation in Iraq in general hindered the delivery of equipment, in addition to the refusal of suppliers of equipment to send trainers to Iraq.
 - Did the project contribute to employment generation (gender disaggregated)?

The project provides a comprehensive learning infrastructure that will enhance employment opportunities for young people to work in hi-tech environment and throughout all sectors of the economy. The estimated number of graduates from these academies is about 1,500 per year. The job market in Iraq is in need of specialized IT-skilled graduates covering advanced technologies. In certain cases, some of these graduates may turn up to be entrepreneurs, starting their small businesses and employing others. Furthermore, by building the capacity of Iraqi youth, the project increases the personal asset of every young Iraqi enrolled in the academies and opens up opportunities to find decent jobs in the Iraqi ICT sector. The implementation of this project provided the building blocks for future expansion of the networking academies infrastructure. The outcome of this project in terms of employability will become evident at a later stage when the students graduating from the academies enter the job market.

f. Provide an assessment of the programme/ project based on performance indicators as per approved project document using the template in Section IV

III. EVALUATION & LESSONS LEARNED

a. Report on any assessments, evaluations or studies undertaken relating to the programme/ project and how they were used during implementation. Has there been a final project evaluation and what are the key findings? Provide reasons if no evaluation of the programme/ project have been done yet?

International Solutions Group conducted a joint evaluation of the INA and the INA Part II projects, in June-July 2008 (attached). This evaluation took place after both projects were operationally closed, and so can be considered a final project evaluation for INA Phase II.

Key findings:

ISG conducted site visits to all of the RNAs in Iraq, attended the INA end-of-project conference, and met with a variety of key project stakeholders. The result of these meetings was the identification of several issues that impeded the full accomplishment of the project goals in terms of progress in the establishment of LNAs and numbers of students graduated.

Key findings of the evaluation:

- The nature of the INA work has been predominantly focused on the public sector for a variety of reasons. Had the project relied on private sector institutions, it would not have reached the degree of success it has reached today. However, now that the basic foundation has been laid, the project must adapt a more innovative approach to expanding further.
- Most of the negative issues that have affected the project and slowed the growth of the
 program are related to the fact that the Networking Academy centers are a new concept for
 the Iraqi public sector officials, who are unsure of where the centers fit in their administrative
 and budgetary structures.
- All RNAs cited difficulties in the administration of the centers due to the lack of a clearly
 defined Iraqi Government policy regarding such administration. There is some confusion as
 to how the centers should be treated as legal entities and which accounting policies should be
 applied. Thus, there are frequent and recurring problems having to do with the non-provision
 of certain needed resources in a timely manner.
- Despite these challenges, the project was substantially successful in the creation of awareness of the importance of the project for the education of the upcoming generations. Most of the participating universities have integrated the Cisco curriculum into their requirements for computer science degrees. Baghdad University has gone even further and made it a requirement for all students in all of its colleges to take the IT course.
- b. Indicate key constraints including delays (if any) during programme/ project implementation
- Security: The main constraints were related to the deteriorating security condition in Iraq (curfews, bomb attacks, etc.). This affected the implementation of the project by delaying normal operation and shipments. For instance, an Iraqi instructor was shot on his way to attend a class in Mosul University Regional Academy. Also, the security situation led to the refusal of suppliers of equipment to send trainers to Iraq. Consequently, inspection of equipment and training of Iraqis for equipment inspection, installation and use was undertaken in Beirut. This increased the cost and delay in implementation. These severe security conditions in Iraq also hindered the delivery of equipment, forbade the establishment of certain sites, and restricted the ability to hold meetings. For instance, some academies could not be established in their planned locations due to the frequent attacks in the vicinity;
- Electricity: Electricity in Iraq is supplied a couple of hours per day, which resulted in delays, such as the repeated interruptions of training sessions which adversely affect the education process;
- Communications: Difficulties in communications (phone and email) between INA project team in Beirut, INA project coordinator in Baghdad, and the main contacts at the academies;
- Shipping to and delivery in Iraq: Multiple companies carry out the shipping, with no retained knowledge or continuous relationship; difficulty in obtaining customs exemption letters; and inexperienced shippers;
- Customs clearance: Logistics in the Government of Iraq to get customs exemption letters proved to be tedious and spanned over several months. Additionally, because of the administrative procedures and rules and regulations of the Iraqi government, a shipment of Cisco books incurred long delays and additional complications;
- Lack of adequate administrative support from universities and colleges where the RNAs and LNAs have been established: All of the RNAs and LNAs tied to public universities complained about lack of adequate financial and administrative support from their university administration. Also, the lack of clarity of the legal status of the centers generally puts the

centers at the whim of the university administration.

- c. Report key lessons learned that would facilitate future programme design and implementation.
 - The following is a list of lessons learned and/or recommendations derived from the challenges encountered in the project.
- Obtaining the customs clearance documents proved to be a lengthy process to be completed. This period needs to be taken into consideration whenever purchases and deliveries are to be made to any Iraqi site. The customs clearance process should be started in parallel with the purchase in order not to encounter delays and demurrage fees while waiting for the appropriate documents. The Iraqi government should be alerted about the lengthy process of customs clearance and UNAMI should approach GoI to give umbrella clearance for all UNDG ITF projects.
- In future projects, a deeper involvement by the Iraqi governmental counterpart should be stressed by the project partners to ensure effective impact on the direct and indirect beneficiaries.
- Include more private sector LNAs in the Cisco Academies Network in Iraq: there are many students that are to be found working or aspiring to work in the private sector that the project has not reached. There are also a large number of computer training centres that could be potential partners with Cisco and viable players in the CNAP in Iraq as LNAs, for example.
- Restructure the legal framework governing the operation of public sector RNAs and allocate
 adequate financial resources for their operation: Due to the fact that the legal and financial
 regulation of most public sector RNAs and LNAs (namely all of them except Mansour
 University College) is not clear, ISG suggests that the Ministry of Higher Education make it
 an immediate priority to define the legal status and appropriate a budget for the centers in time
 for the next season of study.
- Prioritize meeting goals for RNA recruitment of LNAs: the RNAs should complete their mission to establish a minimum of 10 LNAs each. If the public sector is not responding, there are those who may respond in the private sector and who even have the means to finance the purchase of Cisco bundles upon which to train the students. This will circumvent a great deal of difficulty currently being faced associated with weak legal main contracts (LMCs) in public sector settings that are not able to successfully navigate the political terrain within which they are set in order to effectively establish their LNAs.
- Provide additional training for instructors: Additional training is needed on two levels. First, more RNA instructors need to be trained, second, existing RNA instructors that have proven themselves should receive further more advanced training in order to keep them up to speed with any technological developments and developments within the curricula. Continuing education on technological developments and expansion of existing training into more advanced fields for those instructors that have proven their value to their RNA or LNA is critical for building the credibility of the instructor and the institution as a whole.
- Conduct nation-wide awareness campaigns reaching out to all potential partners: Awareness of the importance of the education that the CNAP centers provide must be expanded. Many of the challenges that the program faces has to do with a lack of understanding among influential members of Iraqi society on all levels as to the importance of education in computer science and practical applications that the CNAP program provides.
- Cisco Support Facilitate exchange of information and experiences between existing RNAs and LNAs, and foster a Cisco Culture among instructors and administrators: Many of the RNAs expressed a desire to have more interaction with their counterparts in other RNAs and LNAs around the country. Moreover, staff at nearly every RNA saw it as a priority to be given Cisco identification badges. Both of these points raised by RNA instructors and LMCs lend support to the usefulness of fostering the development of a culture among the various administrators and instructors that will make being an instructor in one of these centers something desirable and respected.

IV. INDICATOR BASED PERFORMANCE ASSESSMENT

	Performance	Indicator	Planned	Achieved	Reasons for	Source of	Comments		
	Indicators	Baselines	Indicator	Indicator	Variance	Verification	(if any)		
			Targets	Targets	(if any)		• • • • • • • • • • • • • • • • • • • •		
IP Outcome									
To provide the Iraqi	To provide the Iraqi people the opportunity to receive Networking education and thus empower them to actively contribute to the rebuilding								
and development process of their country. This project will directly contribute to the restoration of the ICT education system in Iraq, and is									
aimed to address areas of urgent need.									
IP Output 1	Indicator 1	Insufficient	1 RNA (in a	1 RNA	No variance.	RNAs			
Establish 1 RNA	Number of RNAs	infrastructu	major	established		contracts			
in 1 major	established	re and	University in	(in a major		signed with			
university in the		facilities	the Kurdish	University		CISCO			
Kurdish region of		(such as	region of	in the					
Iraq.		laboratories	Iraq)	Kurdish					
		and		region of					
		libraries),		Iraq)					
		and .							
TD 0 / / 4	T 11 2	equipment	22 1 2 1 .	10 1 11	771 · 1	T 3 T A			
IP Output 2	Indicator 2	Insufficient	33 LNAs in	18 LNAs	This discrepancy	LNAs			
Support RNAs in	Number of LNAs	infrastructu	Iraq (total of	established	is due to the	contracts			
their endeavour to	established	re and facilities	39 to be established,	in Iraq (total of 24	living conditions in the	signed with RNAs			
complete the establishment of		(such as	including the	including	surroundings of	KNAS			
the 33 remaining		laboratories	6 established	the 6	the initially				
Local Academies		and	in INA)	established	planned locations				
(6 LNAs already		libraries),	III II (A)	in INA)	of the academies.				
completed during		and		11111111	As soon as the				
the INA project)		equipment			situation permits,				
		- 40-1-10-110			the RNAs will				
					complete				
					establishing the				
					remaining LNAs.				

IP Output 3 Establish Internet connections of academies to appropriate ISPs	Indicator 3 Number of academies that have actually established Internet access.	-	The number of connections will be 55 in total (7 of which were implemented in INA and 48 to be established in INA Phase II.	connection s established (total of 55 including the 7 established in INA)	No variance.	Ensuring adherence to an agreed timeline through follow up and monitoring	
IP Output 1.4 Enrol, train and graduate 30 students from each Local Academy each year when the system is fully operational	Indicator 1.4.1 Numbers of students enrolled and graduated from each LNA.	-	The Academies are expected to graduate 1,500 Cisco Certified Networking Associate CCNA students every year.	•	Variance due to several restrictions: not all academies were established, established academies were not ready to accommodate the number of students, and the socio-economic situation did not allow the full achievement of the target.	Regular monitoring and reporting by the project coordinator in Iraq.	