



## CISCO-USAID-UNDP NETWORKING ACADEMY ALLIANCE

Developing a Sustainable Cisco Networking Academy Program in Afghanistan



Cisco students visit the server room at ANBP (Afghanistan's New Beginnings Program) to learn about the ICT Database for Demobilized Soldiers.

By Suzanne Mikawa <[suzanne.mikawa@undp.org](mailto:suzanne.mikawa@undp.org)>  
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## Executive Summary

The Cisco Networking Academy Program is a comprehensive e-learning program that has been launched in approximately 10,000 educational institutions in over 152 countries worldwide. Through a partnership among UNDP, Cisco Systems, the Ministry of Communications and the International Telecommunication Union, the Academy Program was introduced and initiated in Kabul in 2002. Due to the program's success, USAID Afghanistan joined the partnership in 2004, awarding \$987,686.00 to UNDP to expand the program to secondary provinces, to introduce new curricula, and to strengthen the existing Networking Academies in the areas of sustainability, workforce development and gender. Cisco has contributed the amount of US \$1,037,064 in-kind contribution for program and training support, curriculum updates and equipment.

The Cisco Networking Academy Program in Afghanistan launched its first generation of Academies in Kabul, hosted by Kabul University's Faculty of Computer Science, the Ministry of Communications' Telecommunications Training Center and the Ministry of Women's Affairs. There are currently 727 students enrolled in the program, 32% of which are women. Since 2002, there are a total of 340 Cisco CCNA graduates, 32% of which are women, working at various private sector and public sector job positions in-country. In 2005, the Cisco Academy program graduated 183 students from three Academies in Kabul at Kabul University, Ministry of Women's Affairs, and the Ministry of Communications' Telecommunications Training Center.

We are in the final stage of Phase I for program expansion to Herat, Mazar-e-Sharif and Khost provinces. Kabul University Regional Academy trained 11 instructors from Herat, Mazar-e-Sharif, and Khost in July 2005, internet connectivity service was started at each university site in November, and all three Academies launched CCNA1 classes during the month of December. Phase I activities included purchasing computer lab equipment, classroom renovation, launching Internet connection service, and training local academy instructor candidates. Phase II includes program expansion to the Jalalabad and Kandahar provinces in 2006.

Sustainability activities were launched at Kabul University Regional Academy to build more capacity and stronger leadership at the regional level. Kabul University is participating in the Afghan eQuality Alliance in order to work on the use of ICT for capacity building in Afghanistan. In the areas of gender and workforce development, the CNAP Team has initiated three projects under the Afghan Women in Information Technology (AWIT) Initiative to prepare students for the professional workplace. Cisco Academy students from MoWA Academy participated in two field trips to AIMS and ANBP to tour IT lab facilities and to visit professional Afghan women in the IT field. Thirteen Cisco Graduates from the KU Faculty of Computer Science were hired to create a network design and cost estimate for the Women's Dormitory on KU campus. Three Cisco graduates from KU Faculty of Computer Science were hired by UNOPS and the Ministry of Commerce to work as IT Assistants on the National Customs system.

## Background

In order to build the capacity of Afghan youth, women and civil servants in the field of Information and Communication Technology, UNDP in partnership with Cisco Systems established the first generation of Cisco Networking Academies in Afghanistan in October 2002 with the launch of Kabul University Cisco Networking Academy. This partnership was established as part of the Least Developed Countries (LDC) Initiative - a joint initiative by Cisco Systems, UNDP, USAID, UNV, and the International Telecommunication Union (ITU) to bridge the digital divide in the world's Least Developed Countries. The program in Afghanistan expanded in 2003 to include two new Cisco Networking Academies in the Ministry of Women's Affairs and at the Ministry of Communications (Telecommunications Training Center) through sponsorship by the ITU.

In 2004, USAID joined the partnership to form the Cisco – USAID - UNDP Alliance in Afghanistan. The purpose of this Cisco–USAID-UNDP Alliance is to establish a second generation CNAP, expanding academies to the other major cities in country, broadening the curriculum to include additional courses and companies, and to develop a sustainability strategy for the Afghanistan CNAP (Cisco Networking Academy Program) that will assure its continued existence over the years.

The Cisco Networking Academy Program includes significant hands-on learning and skill-set development and a direct route to industry-standard certification. The Cisco Networking Academy Program qualifies students to pursue a number of industry-standard certifications, including the Cisco Certified Network Associate (CCNA) and Computing Technology Industry Association (CompTIA) Network+ certifications. CCNA (Cisco Certified Networking Associate) teaches students to design, build, and maintain computer networks. The Academy curriculum covers a broad range of topics, from basic networking skills such as pulling cables to more complex concepts such as applying advanced troubleshooting tools. CCNA is the first step in Cisco Career Certifications, which culminates with Cisco Certified Network Professional (CCNP) and Cisco Certified Internetworking Expert (CCIE) certification, the industry's most respected certification for networking professionals.

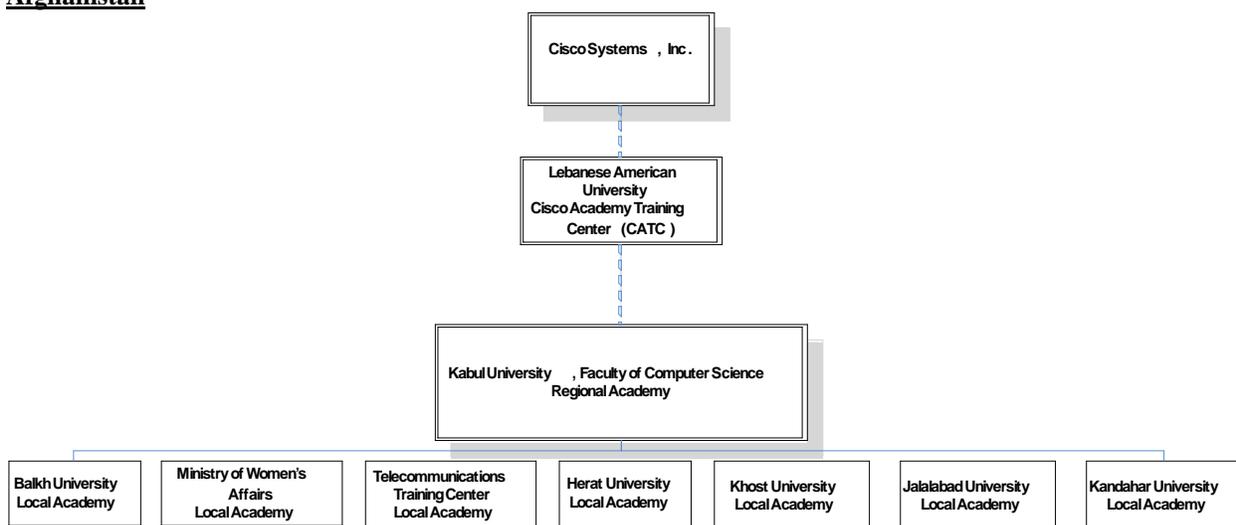
The CCNA is a four-semester program that prepares students for networking and IT-related careers in the public and private sectors and for higher education in engineering, computer science, and related fields. Cisco aims to help bridge the digital divide by establishing these programs worldwide. Cisco is attempting to create a core of specialists who contribute to a modern workforce, moving the country into the information age.

## Project Overview

CNAP Afghanistan currently includes one Regional Academy at Kabul University and five Local Academies hosted at the Ministry of Women's Affairs, the Ministry of Communications' Telecommunications Training Center, and Khost, Mazar-e-Sharif, and Herat provinces. The program plans to launch two more Local Academies in Jalalabad and Kandahar provinces in 2006.

CNAP courses are offered through a three-tier training and support model. In the figure shown below, we show the three-tier support model for CNAP Afghanistan. Cisco Academy Training Centers (CATCs) train Regional Academy Instructors, Regional Academies train Local Academy Instructors, and Local Academies educate students. A Cisco Academy Training Center is an institution that is responsible for supporting, monitoring and training of the Instructors at a Regional Academy. The upgrade of Kabul University to Regional Academy status in July 2004 was a key milestone in the sustainability of the CNAP Afghanistan program. As a result of this, thousands of dollars were saved in support fees and instructor training fees that were being paid, since October 2002, to Hamdard University, the Regional Academy in Pakistan. Kabul University Cisco Regional Academy now receives its training from the Lebanese American University CATC in Lebanon and the Nelson Mandela Metropolitan University CATC in South Africa.

**Figure 1: Three-tier Training and Support Model for the Cisco Networking Academy Program in Afghanistan**



Since joining the LDC Initiative in 2002, Afghanistan has become a flagship country in the LDC Initiative. From the program's inception, the CNAP Afghanistan Academies have graduated over 340 students and have maintained a 30% female participation rate. It is important to maintain this high momentum and continue the progress of the LDC Initiative in country: to

monitor country-wide enrollment levels, to ensure 50/30 objectives, to report to Cisco and partners on program quality standards, and to monitor collection of graduate/employment data, success stories and best practices. IT education is an essential component of ensuring the continuing progress in the reconstruction efforts in Afghanistan.

The Cisco Networking Academy Program in Afghanistan launched its first generation of Academies in Kabul, hosted by Kabul University’s Faculty of Computer Science, the Ministry of Communications’ Telecommunications Training Center and the Ministry of Women’s Affairs. CNAP Afghanistan currently includes one Regional Academy at Kabul University and five Local Academies hosted at the Ministry of Women’s Affairs, the Ministry of Communications’ Telecommunications Training Center, and Khost, Mazar-e-Sharif, and Herat provinces. In December 2005, there are 727 students enrolled in the program, 32% of which are women. Since 2002, there are a total of 340 Cisco CCNA graduates, 32% of which are women.

Academy	CCNA Female Students	CCNA Male Students	Total CCNA Students	% Female Students	Cumulative CCNA 4 Graduates
Kabul University	68	253	321	24%	239
Ministry of Women's Affairs	42	19	61	69%	45
Telecommunication Training Center (TTC)	36	94	130	28%	56
Herat University	50	55	105	48%	0
Balkh University	17	43	60	28%	0
Khost University	16	34	50	32%	0
6	229	498	727	32%	340

## Conclusion

In 2005, the Cisco Academy program graduated 183 students from three Academies in Kabul at Kabul University, Ministry of Women's Affairs, and the Ministry of Communications' Telecommunications Training Center. As a growing number of students and institutions see the benefits of the various IT training courses, demand will inevitably increase for the introduction of other training programs and certifications.

2005 Graduates			
Academy	Female	Male	Total
KU	38	70	108
MoWA	32	2	34
TTC	2	39	41

### Areas of Impact since 2002:

- From a pilot group of 17 students, now more than 727 students are enrolled in the program. In the past 3 months, the total number of students across all three Academies increased by 237. Not only have these students gained valuable networking skills, but they have been exposed to the use of Internet and Networking as an information gathering tool, and are familiar with e-learning concepts.
- Among these students, there is more than one third female participation, which by itself demonstrates the capacity and willingness to mainstream women in education and policy making. Observers of the program have noticed an increase in the women's confidence and comfort in using ICTs.
- The program is now used in three institutions in Kabul and three provincial capitals: Kabul University, the Ministry of Communication, the Ministry of Women's Affairs, Herat University, Balkh University, and Khost University.
- CNAP Afghanistan has surpassed the "300" mark, with over 340 CCNA graduates since the program launch in 2002, 32% of which are women.
- A relationship is building between the Universities in the secondary provinces, starting at the instructor training, but extending through their mutual involvement in the Academy Program. It is hoped that this will lead into a further strengthening of the relationship of the Universities and a true consortium of the Universities in the different provinces.
- By introducing advanced networking, the CNAP has striven to include Afghanistan in the global digital age. Through this initiative, a core of Afghan network specialists has been identified and trained to rebuild the country's networking and internet technology.

## Contact Information

If you have any questions or inquiries with regards to this report, please feel free to contact any of the people listed below:

### **Fazel Hanif**

#### **Cisco Networking Academy Program Manager**

Tel: +93 (0) 70 027 549

Email: [fazel.hanif@undp.org](mailto:fazel.hanif@undp.org)

UNDP/ICT Project  
Ministry of Communications Building  
Mohammad Jan Khan Watt  
Kabul, Afghanistan

### **Suzanne Mikawa**

#### **Cisco Networking Academy Program Coordinator**

Tel: +93 (0) 70 283 459

Email: [suzanne.mikawa@undp.org](mailto:suzanne.mikawa@undp.org)

UNDP/ICT Project  
Ministry of Communications Building  
Mohammad Jan Khan Watt  
Kabul, Afghanistan

### **Abdul Bari**

#### **Assistant Country Director (Programme)**

UNDP Afghanistan

Tel: +93 (0) 70 288 361

Email: [abdul.bari@undp.org](mailto:abdul.bari@undp.org)

### **Eugena Song**

#### **Reporting Associate**

UNDP Afghanistan

Tel: +93 (0) 70 011 374

Email: [eugena.song@undp.org](mailto:eugena.song@undp.org)