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Public-private partnerships on ICT in education in Azerbaijan

Overview of AzNET Project as the biggest PPP on ICT in education in Azerbaijan

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ADB RETA 6275 “Policy on ICT in General Education”

Public private partnership - PPP

Schemes of close collaboration between public authorities and the private sector to achieve specific goals by managing public and private resources.

Best way to secure the improvements in public services.
Private companies are often more efficient and better run than bureaucratic public bodies.

AzNET Project

Internet Access and Infrastructure Development for Research, Educational and Civil Society Purposes

Joint initiative of:

- Government of Azerbaijan Republic
- United Nations Development Programme
- Open Society Institute - Assistance Foundation
- Azerbaijan Research Education Network Association (AzRENA).



Constituted as a national UNDP project with co-funding from OSI-AF and Ministry of ICT.

National coordinator - Dr. Ali Abbasov, Minister of ICT and President of AzRENA.



AzNET Project

Internet Access and Infrastructure Development for Research, Educational and Civil Society Purposes

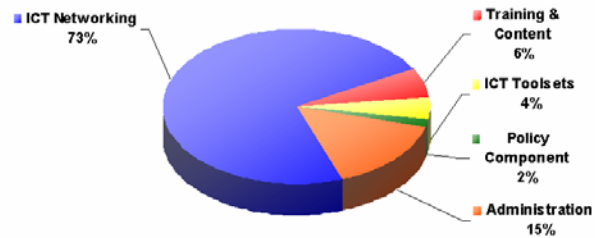
- **Term:** June 2004 – June 2007
- **Budget:** 1,3 million USD
- **Government inputs:** free office space; premises for the project related activities and access to any information necessary to complete mission;
- **UNDP inputs:** legal support through NEX modality; supervision; administrative and service staff; selection of international consultants and evaluators.
- **OSI-AF inputs:** equipment of data network developed since 1998 and Public Internet Access and Training Centers in Baku and Ganja; projects implemented by OSI-AF; technical project staff; expertise support through Education Program; web resources and AZNET.ORG domain name.
- **AzRENA inputs:** interests of Research and Science Institutes and organizations; academic data network; external Internet connectivity via NATO Virtual Silk Highway Project

AzNET goals

- Accessible and reliable ICT infrastructure
- Skilled human resources
- Awareness on ICT
- E-readiness throughout the country

Four strategic components:

- ICT Networking
- ICT Training
- ICT Toolsets
- ICT Policy



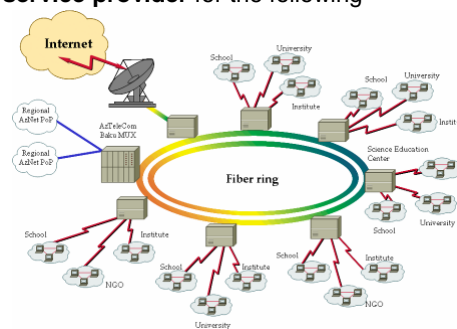
Complexity and Collaboration

- The units pursue their **own specific objectives** within the overall strategy framework;
- **join their resources** to provide comprehensive solutions on cross-cutting issues;
- all activities capitalize on the specialized **know-how and expertise** of each branch
- That helps **avoiding delays** and bureaucracy

ICT Networking component

- Non-profit **Application and Internet service provider** for the following social and economic sectors:

- higher education
- research institutions
- high schools
- public libraries
- non-governmental organizations
- culture and community



- **Server farm and Network Operations Center (NOC)**
- **Backbone** development in Baku and other cities
- **Internet and application services** (gateway, pornography filtering, anti-SPAM, hosting and email, traffic management)

ICT Training component

Trainings to improve the availability and quality of ICT skills in the country:

- **Cisco Networking Academy (CNA) Program**
- **Microsoft IT Academy Program (2005 only)**
- **Exam preparation** courses



Microsoft IT Academy Program

Regional Cisco Networking Academy supports establishment of local academies throughout the country.

- Local management in **setting up new centers**
- **Training for trainers**

ICT Toolsets

- **Free and Open Source Software (FOSS)**

- Localized Mandrake Linux
- Localized OpenOffice suite
- Localized Mozilla Internet suite



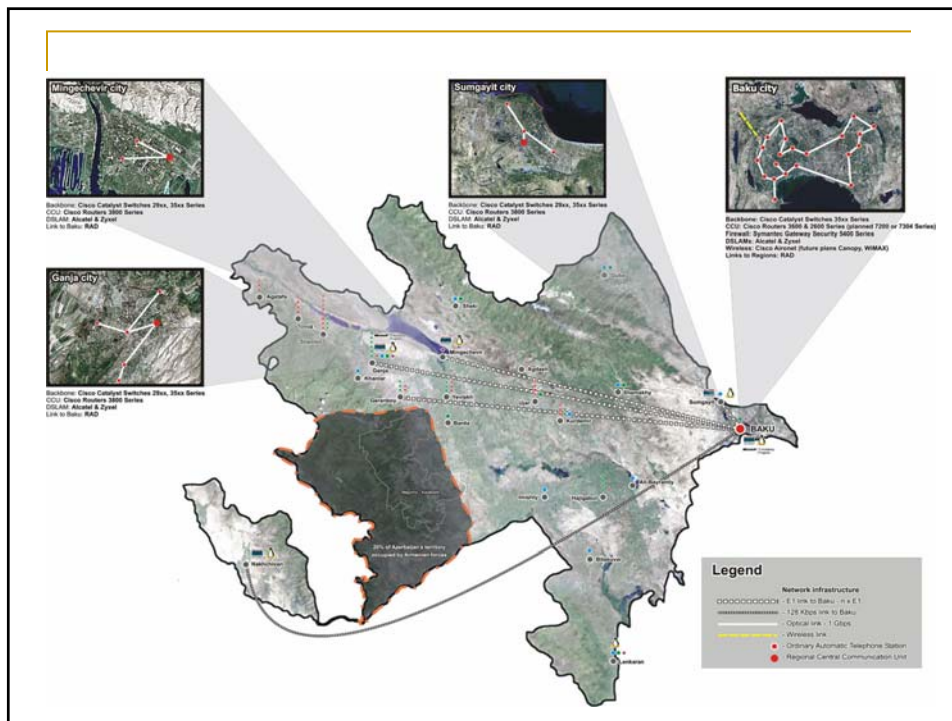
- **eRiders - IT consulting and mobile technical support** for non-profit organizations and public partner institutions
- Manuals and trainings on **PC maintenance** and basic **security** for NGO
- **Web-portal** for NGO

3-year activities - outputs and results

June 2004 – June 2007

ICT Networking

- AzNET has established **15 points of presence (POP)** in Baku and regions.
 - **8 POPs** are part of the Connectivity Establishing Roadmap
 - **NATO Networking Infrastructure Grants** permitted to cover other cities of Azerbaijan.
- **Gigabit Ethernet backbone** (former 64 Kbps) that partly covers Baku and fully covers Ganja.
- **5 cities of Azerbaijan** – Ganja, Mingachevir, Goranboy, Hacigabul and Siyazan are connected to Baku by **E1 2Mbps** links.
- **82 client** institutions connected in total, from which **50 are schools** in Baku and 4 other cities of Azerbaijan. **DSL** with minimum **64 Kbps** speed.
- Additional **Internet services**, like content filtering, anti-SPAM, intrusion detection and firewall, virus protection, traffic control, as well as e-mail and web hosting services.



ICT Training

- Regional Cisco Networking Academy of AzNET has established **15 Local Academies** in educational institutions in Azerbaijan and abroad
- “**Best Academy in CIS countries**” in 2004 Award.
- **Laboratory capacity and curriculums expanded** in collaboration with **Cisco and NATO**. Currently **8 courses** are delivered:
 - IT Essentials: PC Hardware and Software (70 hours),
 - IT Essentials II: Network Operating Systems (70 hours),
 - UNIX Fundamentals (70 hours)
 - CCNA 1-4 (280 hours)
 - Network Security (140 hours),
 - CCNP (280 hours),
 - IP Telephony (70 hours)
 - Wireless LANs (70 hours)
- **Graduates** of AzNET Cisco Academy are being employed by best international and commercial IT companies in Azerbaijan.



ICT Toolsets

- **Localized software in Azerbaijani language:** Linux, OpenOffice, Mozilla Firefox and Thunderbird and others. Distributed to interested schools, NGO and other target institutions free of charge.
- The logo for Linux.gen.az, featuring a small Linux mascot icon and the text "Linux.gen.az" and "Azərbaycanın Linux Sahifəsi".
- The logo for OpenOffice.org.az, featuring the OpenOffice logo and the text "OpenOffice.org.az".
- **Training manuals** on Secure Online Communications and Computer Prophylactics for NGOs, schools and other interested institutions.
 - **eRiders Project** has grown into the **only provider of technical support** and consultancy for schools and NGOs.
 - Online and offline support
 - Site visits and monitoring
 - Call Center and HelpDesk
 - First **CSIRT** (Computer Security Incidents Response Team) in Azerbaijan established
 - Web portal for NGO

Evaluation and outputs

Project end

- In June 2007 Project was officially closed, activities suspended, and all project equipment passed from UNDP to the Ministry of ICT.
 - Both Minister of Education and Minister of ICT **confirmed the need to further support the project**, since AzNET have developed valuable and very important capacity, that are crucial and needed for smooth integration of ICT in education.
 - Ministers addressed **international donor organizations to support** AzNET for one more year, until the start of the next “State Program on Integration of ICT in Education 2008-2012”.
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Evaluation

- Annual evaluations on sustainable development to increase the quality of services provided.
 - Despite the presence of activities for various target groups, **AzNET may become one of the main solution providers for schools and key players** within government's plans on integration of ICT in education.

 - Since Project start **positive changes** in the country have occurred.
 - **"State Program on Provision of ICT to General Schools 2005-2007"**,
 - **"State Program on Integration of ICT in Education 2008-2012"** is under preparation, with **focus on Internet connectivity, trainings, technical and methodological support.**
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Positive sides

- Activities correspond to the National ICT Strategy 2003 – 2012.
 - **Many years experience** of providing Internet connectivity and services, technical support and other services to schools.
 - Connected to Internet **50% of all schools** having Internet connectivity (120 or 2,4%). There is no another organization in Azerbaijan having similar background.
 - **Confidence** in schools, NGOs, Government bodies (Ministry of Communication and IT, Ministry of Education, Presidential apparatus) and International organizations.
 - **Strong support** to its users, who give a high assessment of AzNET and appreciate its activities. Especially eRiders team is highly praised in schools.
 - **Strong team** of highly qualified enthusiastic, creative and active IT specialists.
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Negative sides

- **Lack of legal form.** It's vital to be a legal body for flexible and sustainable development.
- **Insufficient advocacy.** In spite of AzNET being known on state management level it has to make much more efforts in promoting itself in wider society.
- **Non-scalable character** of some activities, like e-Rider. Current eRiders model is not suitable for supporting big amount of schools;
- **No more UNDP “services”** - funds management, fund-raising and in various administrative matters, like e.g. custom clearance, travels, visas, etc. After becoming a self-standing legal body AzNET will have to deal with management and financial issues on its own.

Current status (AzNEXT)

- **Relief International (RI)** – an American NGO based in California, agreed to provide financial and administrative support to the Project.
- Ministry of ICT, Ministry of Education and Relief International agreed to prolong the Project activities.
- AzNET activities are done under Relief International authority in close cooperation with Ministry of Education.
- AzNET activities were **merged with Madad Humanitarian Organization Public Union** - national partner of RI in Azerbaijan, adding **teacher professional development** courses for subject teachers of Azerbaijani schools.
- RI / AzNET becomes the **main providers of Internet connectivity, training for technical and pedagogical staff, technical support, technical polygon and consultancy.**

Changes and Challenges

- Move to **fee-based services** and develop financial models
- Accommodate **structural changes** in structure
 - **Application and Internet Service Provider**
 - External connectivity provided with discounts by **Delta Telecom**
 - **ICT Training**
 - Cisco Networking Academy Program
 - Intel Teach to the Future
 - Relief International Schools Online TPD
 - Hewlett Packard "GET-IT" Program;
 - **Technical support**
 - Call center and Monitoring
 - **ICT Consultancy**
 - Test-bed and polygon



Perspectives

- Models, solutions and templates, developed by RI / AzNET, are smoothly integrated into the activities of the network of **Data and Resource Centers**, established by Ministry of Education within State Program for 2008-2012 years.
- **Improvement** of RI / AzNET activities now means improvement of **basis for future Data and Resource Centers**.

Thank you!

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