

## The Bulgarian Government creates a nationwide network of i-Centres with the aim of helping to close the digital divide

“THE I-CENTRE PROJECT WILL BRING REAL BENEFITS TO THE BULGARIAN PEOPLE, AS WELL AS TO BUSINESS USERS. IT SHOWS HOW THE POWER OF BROADBAND AND OTHER TECHNOLOGIES CAN PROVIDE THOSE IN RURAL AREAS WITH THE OPPORTUNITY TO ACCESS INFORMATION AND COMPETE ON AN EQUAL FOOTING WITH OTHERS.”

Nedelcho Nedelchev, Deputy Minister, Ministry of Transport and Communications

### Executive Summary

#### CUSTOMER NAME

- The Bulgarian Government

#### INDUSTRY

- Public Sector

#### BUSINESS CHALLENGE

- With Bulgaria expecting to join the EU in 2007, the need for its citizens to be more digitally aware has never been more pressing. In 2004 the Government launched the i-Bulgaria programme, a proactive initiative to raise its population's IT skills. Cisco Systems is providing expertise through its Internet Business Solutions Group.

#### NETWORK SOLUTION

- The i-Centre rollout will provide broadband access to rural communities, using virtually the entire Cisco Internet toolkit through a Content Aggregation and Distribution Network (CADN) with Points of Presence (PoPs) in local post offices throughout Bulgaria

#### BUSINESS VALUE

- The Bulgarian Government has set aggressive targets for i-Centres, hoping to have hundreds operational by 2006. Run by a Telecentre Manager, each will have its own business plan and will be a self-sustaining and revenue-generating business. Cisco has modelled each i-Centre's projected profitability.

**Launched in 2004, i-Bulgaria is an ambitious plan by the Bulgarian Government to make the country more PC and Internet literate. A major part of the strategy involves i-Centres, based in hundreds of rural post offices across Bulgaria, enabling local people to affordably access the Internet. It is hoped this will not only drive wealth creation but will also close Bulgaria's digital divide. Cisco is playing a key part in the rollout, providing expertise and hardware.**

#### BUSINESS CHALLENGE

By boosting economic growth, Internet technology has the potential to create new and better jobs, and generate greater prosperity. European governments are keen to ensure that these benefits are available to all, irrespective of where they live or how much they earn. In May 2004, the Bulgarian Government launched the i-Bulgaria programme to improve digital literacy and help the country compete in the knowledge economy.

According to the Bulgarian Information Technologies Association, only six per cent of Bulgarian households use a PC, so the countrywide availability of i-Centres (Internet and computer facilities for local communities) should boost the use of modern technology and raise the level of ICT skills generally. The Government intends that this initiative will raise levels of education, transform standards of living, contribute to the development of the economy, and create new jobs.

The Bulgarian Ministry of Transport and Communications together with the United Nations Development Programme (UNDP) is financing this project. The UNDP is also acting as project manager and overall co-ordinator for all activities related to the equipment and functioning of the i-Centres in over 160 of the country's municipalities by mid-2005.



Prepared by Cisco Systems, Inc.  
Internet Business Solutions Group

The i-Centre roll-out, as with many e-government infrastructure projects, will use virtually every technology in the Cisco Internet toolkit – from routers and switches to security systems, wireless technology, and IP telephony. But Cisco is not just supplying technology to support Bulgaria’s moves towards e-government: it is also transferring knowledge through its Internet Business Solutions Group (IBSG).

Bulgaria’s i-Centres will make affordable educational, informational, and other services accessible to citizens and businesses throughout the country. The i-Centres will operate as self-sustaining, revenue-generating businesses. Run by a Telecentre Manager, each i-Centre has its own business plan, striving to provide local services profitably. Business analysts in each i-Centre have worked with Cisco consultants to model overall return on investment (ROI) based on the number of people expected to take advantage of the i-Centre’s services, and other performance metrics such as service usage. Krassimir Simonski, Project Manager of the i-Centre project, says: “Every service has a different business case specific to each i-Centre. If an i-Centre is in a small town, we’ll encourage outside investment, instead of generating revenue just from the users.”

**“CISCO IS A VALUED PARTNER OF THE BULGARIAN GOVERNMENT. THEY RECOGNISED THE POTENTIAL OF THE PROJECT RIGHT FROM THE START AND, THROUGH THEIR INTERNET BUSINESS SOLUTIONS GROUP, PROVIDED GREAT SUPPORT FOR OUR APPROACH TO BUSINESS PLANNING AND IMPLEMENTATION.”**

*Orlin Kouzov, Director of the ICT Development Agency*

## NETWORK SOLUTION

Cisco’s Internet Business Solutions Group began its engagement with the Bulgarian Ministry of Transport and Communications in 2002 with a Net Readiness assessment, which analysed the Bulgarian e-government strategy. IBSG consultants then assisted with the development of an e-government roadmap for Bulgaria, suggested the use of an intranet portal, and helped design a prototype.

IBSG shared best practice examples with the Ministry, including other e-government projects (e-Mexico, Australia’s Centrelink, and Kennisnet in The Netherlands). These inspired the thinking for the i-Bulgaria project – a combination of learning from other countries blended with Bulgaria’s unique needs – to offer affordable Internet connectivity, IT training and services to citizens and businesses.

“There were also good practices in countries like Hungary that served as an example of how the Government could invest in technology for the future of its people,” says Orlin Kouzov, Director of the ICT Development Agency. “Cisco is a valued partner of the Bulgarian Government. They recognised the potential of the project right from the start and, through their Internet Business Solutions Group, provided great support for our approach to business planning and implementation.”

In late 2003, the Ministry of Transport and Communications appointed the ICT Development Agency to project manage the i-Centre initiative on its behalf, basing most i-Centres in offices of Bulgarian Posts, the state-owned Post Office (a naturally familiar environment to most people). Krassimir Benevski, IT Programme Officer at the UNDP, says: “The technology in each i-Centre will be very similar, so that the implementation model can be easily replicated, and as many centres as possible can be opened up as quickly as possible.”

Bulgarian Posts has 3,000 branches in towns and villages scattered right across the country, and because people use them regularly and already have a relationship with Post Office staff, the Government hopes this will make it easier to introduce the concept of i-Centres, as they will effectively be seen as another Post Office service. “This relationship is going to be very important, especially when visitors are suspicious or cautious of trying something new,” says Alexander Ognianov, Director of the Information Society Directorate and Chairman of Bulgarian Posts.

Bulgarian Posts is the only nationwide organisation in Bulgaria that can accept a document from the public and send it electronically to the organisation or institution for which it is intended. Krassimir Simonski explains: “We are therefore in a good position because we are able to set up shop alongside their facilities. Post Offices are usually also the only places you can pay bills in small villages, where there are no banks.” i-Centres will have access to online administrative services, which form part of the country’s e-government platform. Twenty administrative services (including company and vehicles registration) are scheduled to be available online within 12 months. The Government is deploying special smart cards with personal digital signatures to identify different users of the system and confirm a customer’s identity before a service is delivered. Since credit cards are not used by many people in Bulgaria, this will also ensure payment where required.

**“MANY E-LEARNING SERVICES ARE ALREADY AVAILABLE VIA INTERNET CLUBS AND OTHER SOURCES, BUT THEY ARE COMPARATIVELY LOW LEVEL. WE CAN HELP RAISE THE BAR BY OFFERING HIGHER QUALITY AND MORE COMPREHENSIVE SERVICES.”**

*Krassimir Simonski, Project Manager of the i-Centre project*

## **BUSINESS VALUE**

In large towns, the i-Centres will focus on high level IT skills training through the Cisco Networking Academy (Cisco’s global education programme, which teaches people how to design, build and maintain computer networks). Special business courses will also be offered. People who visit i-Centres will be able to choose how they receive the various services that are being offered. i-Centre staff will offer skills training to those who do not know how to use a computer.

Five i-Centres were piloted in the larger towns of Lom, Gotze Delchev, Dobrich, Smyadovo, and Avren before full rollout began. “We tested the i-Centres in different kinds of towns – large, medium-sized and small. Now we have a much better idea of what we should do in different kinds of locations. Many e-learning services are already available via Internet clubs and other sources, but they are comparatively low level. We can help raise the bar by offering higher quality and more comprehensive services,” says Krassimir Simonski. Larger companies and local public institutions will also be offered web site hosting and firewall protection, and be able to buy and sell products and services using their own eBusiness Network. The city-based i-Centres will also offer infotainment (information and entertainment) in an Internet Café, but live inside the local Post Offices.

People will be taught how to use a number of online tools and services that are provided by various Government institutions. Those who would like to further their education but who cannot attend a college or university will be offered distance learning courses, as well as English and German language training. Staff will help users find basic information or guide them through a service. In time, this will be expanded to provide a local or toll free phone number, which users can call for assistance. They will be able to pay as they go, pre-pay, or take out a membership subscription. Nedelco Nedelchev, the Deputy Minister in the Ministry of Transport and Communications, says: “The i-Centre project will bring real benefits to the Bulgarian people, as well as to business users. It shows how the power of broadband and other technologies can provide those in rural areas with the opportunity to access information and compete on an equal footing with others.”

## TECHNOLOGY BLUEPRINT

The i-Centre concept is of a Content Aggregation and Distribution Network (CADN), which has Points of Presence (PoP) in Post Offices, each of which is equipped with multimedia PCs with broadband access to the Internet. CADN aims to deliver a large variety of services to the i-Centres. Suppliers can customise what information and services they want to deliver, and i-Centre users can choose what they require. The CADN hub, based in Sofia, distributes information and services to each of the regional i-Centres, which act as a source of local community information. A small town can publish information about its products and services, and get closer to other communities in Bulgaria and worldwide.

As well as being heavily involved with the project's business planning, Cisco is also equipping the i-Centres with Internet access technologies, helping i-Bulgaria build its CADN and organise content. Local project committees will organise implementation and be involved in marketing their own i-Centre. Each i-Centre will provide ISP access and offers citizens and local businesses email facilities, basic computer applications and IT training. Selected i-Centres, most probably the larger city centre venues, will be equipped with Cisco's MeetingPlace IP/VC audio and web conferencing products.

Cisco Catalyst 2950 Series Switches provide Fast Ethernet and Gigabit Ethernet connectivity, and Cisco 1760 Modular Access Routers will deliver fast, reliable and secure Internet and network access using various high-speed WAN connectivity technologies. Security is crucial and the 1760 supports wire-speed IPSec VPN, firewall protection and intrusion detection. It also offers a migration path to voice over IP and IP telephony services. Wireless access to business travellers with laptops will be possible using Aironet 1100 Series Wireless Access Points. Cisco 7900 Series IP phones will be installed in the i-Centres so that users can make low-cost phone calls between i-Centre communities. The i-Centre network will be connected to a nationwide optical fibre network, run by the Bulgarian Telecommunications Company (BTC), which acts as the service provider. As the initiative progresses, Virtual Private Networks (VPNs) will link in other local institutions and libraries.

## MORE INFORMATION

For further information on Internet business solutions, visit <http://www.cisco.com/go/ibsg>



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