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“ Availability of powerful software firms, sufficient number of IT specialists, but lack of investments and starting capital [describe the Ukrainian IT sector].”

—Vice president, *Ukrainian IT company*

“ The Ukrainian market for Internet services depends more on availability of telecom and computer infrastructure than on demand for ISP services.”

—IT consultant, *Ukraine*

Like all of the former Soviet republics, Ukraine has faced a wide array of economic and political challenges since gaining its independence in 1991 (Ranking in Business and Economic Environment micro-index: 66). However, talented human capital and a rich industrial legacy have been key to the country's gradual transition to a market economy and the Networked World. Ukraine has tried to improve its national telecommunications infrastructure as it strives for membership in the European Union. As a result of foreign investment in the private sector, there has been exceptional growth in Internet use in recent years. Ukraine ranks sixty-sixth overall in the Networked Readiness Index.

Ukraine's fairly low teledensity correlates with its weakly developed telecommunications infrastructure, obsolete analog telephone network, and lack of sufficient investment in the ICT sector. Wireless services have grown quickly because of the high installation costs and long waiting periods for fixed telephone lines. However, the high costs of operation make mobile services affordable to only a small proportion of the population.

There are approximately 270 ISPs in the Ukrainian market. Some ISPs now offer free registration and equipment to attract new clients. A significant decrease in the cost of dial-up Internet services and a rise in the number of free off-peak ISP services have led to a rapid increase in the number of Internet users within the last couple of years, from 100,000 to 700,000.<sup>1</sup>

Although Internet access is still too expensive for the majority of the population, the privatization of Ukrtelecom, the state-owned telecommunications company that controls national telecommunications services over fixed lines, is expected to expedite Internet development in the country (Ranking in Effect of Telecommunications Competition: 61). Liberalization of Ukrtelecom was identified as a main priority by the Ukrainian government in

2000, and the first steps toward privatization have begun through privileged sales of shares to the company's workers and other local companies.<sup>2</sup> The Internet Association of Ukraine is planning to submit a petition to the Antimonopoly Committee concerning the price policy of Ukrtelecom, which allegedly leverages its monopoly position to steer potential clients to its own Internet provision services.<sup>3</sup>

ICT literacy and ICT education recently have become the center of attention in Ukraine as the public and private sectors have begun to work together on ICT training programs (Ranking in Quality of IT Education: 55). For example, the Ukrainian Distance Learning System,<sup>4</sup> made up of educational and R&D institutions, government agencies, corporations, and nonprofit organizations, is developing innovative applications of ICT in education. The joint stock company UkrSat (Ukrainian Satellite Systems), under its initiative, Young Generation in the 21st Century, provides more than 350 schools nationwide with equipment and Internet access (Ranking in Internet Access in Schools: 65).<sup>5</sup> The Internet Access and Training Program, sponsored by the U.S. government and administered by the International Research and Exchanges Board (IREX), provides free Internet access to Ukrainian alumni of U.S. universities and colleges.

E-commerce is in its initial stages (Ranking in e-Commerce micro-index: 54), and is hampered by the absence of online payment systems, an underdeveloped electronic security system, and a lack of specific Internet regulation. Another major impediment to e-commerce expansion is low PC and Internet penetration in Ukraine. There is also poor protection of intellectual property rights overall in the country.

## Key Facts

Population	50,500,000
Rural population (% of total population) 1999	32.12 %
GDP per capita (PPP)	US\$3,693
Global Competitiveness Index Ranking, 2001–2002	69
UNDP Human Development Index Ranking, 2001 (adjusted to GTR sample)	53
Main telephone lines per 100 inhabitants	19.88
Telephone faults per 100 main telephone lines	34.47
Internet hosts per 10,000 inhabitants	7.09
Personal computers per 100 inhabitants	1.59
Piracy rate	89.00 %
Percent of PCs connected to Internet	3.62 %
Internet users per host	6.90
Internet users per 100 inhabitants	0.39
Cell phone subscribers per 100 inhabitants	1.62
Average monthly cost for 20 hours of Internet access	US\$16.41

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