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“ In the process of the fast increase of IT business, Estonia continues to lack skilled IT specialists.”

—*Estonian government official*

“ IT companies are relatively small and are not able to run big projects nor enter global markets. One possible solution can be to network [and] integrate existing small/medium IT companies.”

—*Estonian IT executive*

Estonia has been a leader among central and eastern European countries in liberalizing its fixed-lines telecommunications market. The nation is also the regional leader in Networked Readiness with its twenty-third overall ranking, comparable to France and Israel.

After reestablishing independence in 1991, Estonia made significant progress in reforming economic and social conditions in the country. Commitment to this reform process, and to a new rule of law, made it one of the first countries in the Baltic region to be included in EU accession negotiations (Ranking in ICT as Government Priority: 3). One of the country's major challenges has been to make the transition from its industrial dependence to a Networked Economy.

The Estonian telecommunications infrastructure is advanced and has been completely upgraded. There is state-financed Internet access in Estonia for government, education, and medical sectors and affordable dial-up Internet costs for the public (Ranking in Internet Price and Quantity: 21). Internet penetration is relatively high by European standards.

Despite an increasing number of students with ICT degrees, the country still lacks a skilled ICT workforce. Moreover, because of noncompetitive salaries, highly qualified ICT specialists have an increased tendency to work abroad (Ranking in IT Brain Drain: 29). To combat these trends, the government and various NGOs are introducing new initiatives to increase the ICT workforce. In the education sector, the Tiger Leap program¹ is aimed at connecting schools and increasing computer literacy among teachers and students.

Several national programs focus on Network Use and e-government. The Look@World initiative's² goal is to surpass Finland in Internet use in three years, and to reach an Internet penetration of more

than 70 percent. A nationwide government project, e-Citizen,³ was designed to provide better communication and cooperation between Estonian citizens and the public sector by introducing and supporting Internet services (Ranking in Online Government Services: 3).

Proximity to Finland and a reasonably good telecommunications business environment have influenced a rapid increase in the rate of mobile telephone penetration; mobile density now exceeds the tele-density of fixed lines. Several mobile companies have tested the third generation General Packet Radio Service (GPRS).

Liberal economic reforms have also created a favorable environment for foreign investment in Estonia. Estonia's government has become more connected and ICT-literate and is a global leader in integrating e-government practices into existing frameworks (Ranking in e-Government micro-index: 5). The Estonian administration is equipped with PCs and has Internet access, and the Prime Minister's office opened a website allowing visitors to provide their comments on and recommendations for drafts of future legislation.⁴ Most notable, one of the initiatives that has garnered the most attention has been the Electronic Cabinet, which allows government ministers to review legislation, make comments and suggestions, and vote online.⁵

As part of B2C e-commerce development, the number of online banking transactions is increasing rapidly, and Estonians are taking advantage of more developed online activities such as trading equities, submitting tax declarations, buying drugs, purchasing ICT supplies, and accessing the latest news reports (Ranking in Internet-based Payment Systems: 2).⁶ However, despite the presence of 400 ICT companies in Estonia, innovation in products and services is relatively low, and many Estonian businesses feel hampered by their country's small market.⁷

Key Facts

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|---|-----------|
| Population | 1,439,197 |
| Rural population (% of total population) 1999 | 31.14 % |
| GDP per capita (PPP) | US\$9,178 |
| Global Competitiveness Index Ranking, 2001–2002 | 29 |
| UNDP Human Development Index Ranking, 2001 (adjusted to GTR sample) | 36 |
| Main telephone lines per 100 inhabitants | 36.32 |
| Telephone faults per 100 main telephone lines | 28.60 |
| Internet hosts per 10,000 inhabitants | 284.25 |
| Personal computers per 100 inhabitants | 13.55 |
| Piracy rate | NA |
| Percent of PCs connected to Internet | 15.44 % |
| Internet users per host | 8.96 |
| Internet users per 100 inhabitants | 25.47 |
| Cell phone subscribers per 100 inhabitants | 38.70 |
| Average monthly cost for 20 hours of Internet access | US\$9.84 |

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