

# Universal access to the Internet

## A value proposition for the entry consumer

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Mobile communications devices are used all over the world by more than two and a half billion people, a figure which increases by over a million new subscribers every day. As a market leader, our vision at Nokia is a world where the remaining four billion are also connected. We believe that individuals, communities and nations worldwide can and should have affordable access to all the social and economic benefits that mobile technology can confer.

Experience and recent studies demonstrate that universal access to Information and Communication Technologies (ICTs) boosts the economic and social development of nations. When people can obtain information affordably and reliably for productive use, improved business development and social welfare follow.

Using access devices such as computers, mobile phones, telephones, televisions and radios, connected people can create, accumulate and disseminate knowledge. Their professional and social contacts improve, they interact with commercial and public-sector organizations more easily, and they become more productive.

Mobile phones provide numerous advantages for the most effective use of ICTs. For many people in developing countries, the combination of low total cost of ownership (TCO), micro-prepaid top-ups and micro-credit schemes makes mobile phones more affordable than alternative access tools. Moreover, the convergence of technologies means that a single mobile device can now act as much more than a phone. It can also be a radio, music player, camera, calculator, and Messaging and Internet access device.

The gap between PCs and mobile phones is closing fast with innovative solutions bridging these two worlds. Technology convergence and increasing computing power have turned mobile phones literally into small computers. With penetration rates higher than those for PCs, mobile phones offer many users their first experience of features such as Web browsers and email. This experience could be even further improved by connecting the mobile phone to an existing TV set (and indeed penetration of TV sets in emerging markets is very high), and potentially an external keyboard. This simple solution has the potential to be the most cost-effective way to achieve universal access to the Internet, specifically targeted at the entry consumer at the lower end of the income pyramid.

Mobile technology has also advantages from an infrastructure perspective. The lack of a fixed-network infrastructure means that GSM/EDGE and WCDMA/HSPA technologies will be the primary access to high-speed information networks in many developing countries. The worldwide economies of scale of GSM/EDGE and WCDMA/HSPA technologies enable a continuous reduction in TCO, so that data services can ultimately be delivered to a mass market.

For individuals, greater access to ICTs has life-changing potential. For societies, the impact of greater access to mobile technology on entrepreneurial activity, healthcare, education, and financial transactions has significant implications for socio-economic development.