

## Report from the Field: Skipping Hard-Wired Technology

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**Fig. 1: Pasha Zagorodnyke.**

The following article is derived from my research in Ukraine on the 11<sup>th</sup> of July 2005. It discusses mobile phone use and how their technology serves the population that uses them. It also briefly considers how mobile phones arrived in the Ukraine.

The basic concept of a mobile phone can be traced back as far as 1947 in the U.S. Researchers at Bell Labs developed the concept of mobile car phones used by police. However, the technology to implement this concept was not available at the time. The first modern portable handset was not invented until 1973. Martin Cooper, who had previously worked for Motorola, invented the first modern portable handset. More importantly, the commercial use of a mobile phone in America was slowed by the Federal Communications Commission (FCC) regulations. Only in 1982 did phone service become commercially available in the United States. (<http://inventors.about.com>).

Further technological developments have led to increased capabilities and further adaptations of cellular phone service in America and Europe. There is now worldwide demand for mobile phone service.

In the Ukraine there are over twelve mobile service providers, including UNC, Sim-Sim, Ace&Base, and UNI, to name a few. Affordable tariffs attract more users. One of the biggest Ukrainian mobile operators, Actelit, has 1,200 cell towers, with plans for continued growth. (<http://www.mobilnik.org.ua/info/operators.php>) This demand is partly driven by the fact that rural Ukraine telephone infrastructure is largely underdeveloped.

For example, in one small hamlet in Ukraine, with a predominantly elderly population, the only way to contact family members living elsewhere is by mobile phone. Pasha Zagorodnyke, pictured in Fig. 1 above, relies heavily on mobile phone service to stay in touch with her son, who lives in a city about 300 km distant. She is not the only user of this technology. All the villagers say it is a godsend and they all worship it. Some have commented to me that they could not live without it now. Without the mobile phone it would not be possible to get in contact with their families who left for the major city of Ukraine, Kiev, in search of better opportunities.

Most houses are empty, owners passed away. They have left everything ready to move in and live. Once a blooming hamlet, this small village has become an isolated place for older and more vulnerable occupants. They have nowhere else to go. The hamlet became less attractive after the fall of the Soviet Union and government farming. For an older generation, growing vegetables and keeping animals is the way to survive.

There is no hospital, school, or post office, no gas or water mains. The nearest amenities are 16 km away, which for the elderly is an impossible walk. Every villager comes to Pasha Zagorodnyke to make a call from time to time. In compensation, they bring whatever they can, often something from their garden such as a bowl of fruit, vegetables, or milk. For these people, mobile phones serve as a lifeline, a dream come true.

To my astonishment, the elderly of this hamlet are using the most advanced technology to communicate, but their social behavior has not changed for decades. In this respect the mobile phone bridges vast distances and provides for 'emergency use.' The occupants of this hamlet doubted whether the infrastructure would ever be laid for telephones. But, the mobile phone circumvented this need and answered their prayers. It is no longer necessary for them to have a "land line" infrastructure. A single call can provide hope that

someone would come and see them – a daughter, son, grandchildren, niece or nephew. They are always happy to see people. When I was there they treated me like a goddess. I was given the best food, bed, and most of all a warm welcome.

### **References**

<http://inventors.about.com/library/weekly/aa070899.htm> (9/26/2005)

<http://www.mobilnik.org.ua/info/operators.php> (9/26/2005)