



## Customer Profile

iPKO was established in 1999 as Kosovo's first internet service provider. Since then the company has expanded its offering to include integrated services and content in mobile communications, fixed telephony and media. It fronts the Telekom Slovenije Group consortium, also backed by Telekom Slovenije and Mobitel. The consortium won the area's second mobile license and subsequently launched their GSM network commercially under the brand of iPKO, just six months after being awarded the concession. iPKO's commercial aim is to become Kosovo's leading operator.

Website: [www.ipko.com](http://www.ipko.com)

## SOLID FOUNDATIONS

Overcoming challenges for fastest ever implementation of GSM network

iPKO, Kosovo and Ericsson, Croatia implement an entire GSM network in record time. A cutting-edge backhaul solution results in a dependable offering that is a public phenomenon for Kosovo.



“Ericsson has a reputation – anyone can supply products, but everyone knows how well Ericsson’s solutions work.”

Jaroslav Sefc,  
CTO, iPKO

Kosovo is uniquely challenged. Still recovering from years of conflict, the area has an unemployment rate of around 50 percent, as well as huge population displacement due to its refugee crisis. The effect on the mobile telephony market is dramatic – prior to iPKO’s entry there was just one publically owned mobile operator. Prices were high, the offering was primitive and the service was often unreliable. Due to this, market penetration was at just 25-30 percent.

This had a particularly significant impact on people’s lives – due to the refugee crisis, many people live away from their friends and relatives, and as such telecommunication is relied upon even more than in other parts of the world. Kosovo’s Telecommunication Regulatory Authority licensed a second GSM operator with the aim of bringing affordable mobile telephony to every household.

Backed by a consortium of Telekom Slovenije and Mobitel, iPKO won the license and immediately set about researching the needs and expectations of the general public and planning the network. It had two main requirements: the supply and installation of the equipment, and the management of the network. It chose Ericsson for both contracts, meaning that as well as implementing the entire network, Ericsson would provide Managed Services for three years. Jaroslav Sefc, CTO, iPKO explains the reasons for Ericsson’s selection: “Firstly, we believe in Ericsson. It has a reputation – anyone can

supply products, but everyone knows how well Ericsson’s solutions work. Secondly, Ericsson has an unmatched local presence in the wider region. They can efficiently hire people in the local market, manage these people and effectively run the whole department.”

The challenges provided by the unforgiving Kosovan winter gave the supply and installation project a real sense of urgency, and only nine months passed between the license being signed and the commercial network being switched on. Ericsson completed the work in the field in just three months, something that has never previously been achieved for such a project. Ivan Barac, Key Account Manager, Ericsson, Croatia considers this aspect of the project a particular success: “Kosovo has some challenging terrain. We had to install antennas and equipment over 2 000 meters above sea level, often in bad weather and with winter approaching. But thanks to our resources and the competence of our people we succeeded, and I believe we are the only vendor who can do these end-to-end projects in such a short time.”

The solution includes a complete mobile backhaul offering, comprising of microwave and optical products managed by a common management system. Klas Rapphed, Product Marketing Manager, Ericsson explains: “The mobile backhaul solution provides cost efficient connections between the base stations. You can use microwave, fiber or copper, and Ericsson can supply all of those. The long-term advantage with the iPKO solution is that it fully supports an evolution to packets, when the day comes for the operator to introduce more advanced data services. The flexibility of the products makes it possible for the operator to use the solution as it is today in new rollouts for efficient backhaul of voice. iPKO selected both





microwave and optical products. The microwave products were Ericsson MINI-LINK TN and Marconi LH. MINI-LINK TN has advanced integrated traffic handling and is used in the far end of the network, whereas the Marconi LH is the trunk radio, for higher capacities and longer distances. Marconi OMS is a family of flexible optical products to support the higher capacity needs in the network. All products are very easy to scale in capacity. The whole mobile backhaul is managed by a common manager, ServiceOn, which adds a lot of value for the customer in terms of lower OPEX.”

The benefits that come from Ericsson’s solution are plentiful for iPKO. Firstly, due to the acute local challenges of tough winter and potential political instability, the network has been designed as a protected ring with

internal mechanisms of resilience. If there are difficulties in one area, the signal can go the other way around, resulting in no outage whatsoever. In addition, due to the network being built from scratch, all the products use the latest technologies. That means iPKO has the best available resources along with a very scalable network, both in terms of capacity and offering. Although the initial investment was relatively small, the solution is capable of being cost-effectively expanded at any time, with no downtime at all. And the products supplied by Ericsson are easily upgraded to provide more advanced data services to meet changing public demands.

With such stable foundations, the new network is making a big impression already; market penetration is up to 40 percent, and prices have fallen by 40-50 percent. iPKO’s



“ I believe we are the only vendor who can do these end-to-end projects in such a short time.”

Ivan Barac,

Key Account Manager, Ericsson, Croatia



wider, more reliable offering attracted 100 000 customers in its first two operational months, and that figure is now at around 350 000. Due to such rapid growth, network expansion is already underway, explains Jaroslav Sefc: “Ericsson did a great job in a very short time and in very difficult conditions. From day one our network had capacity for the first operational year, but now we need to expand this. Luckily, when we prepared the contract Ericsson knew exactly what we wanted and we planned three phases for network growth. We started with 61 base stations, and now we have 170. By the end of this year we want to have 300.”

As well as providing a boost to the local economy through investment, the benefits of iPKO's solution are having a profound effect on the people of Kosovo, Ivan Barac says: “iPKO are perceived as the innovator with newer services, better prices and better customer understanding and support. It's a public phenomenon here. Prior to iPKO, people here were happy if their call connected after the fifth or sixth attempt. Now iPKO works first time, so it has had a real social impact; it's a huge step.”

## Overview

### Customer Objective iPKO, Kosovo

#### Customer Objective

- Build complete GSM network from scratch within strict time constraints
- Deliver reliable, cost-effective mobile telephony to Kosovan public

#### Ericsson Solution

- GSM network implementation
- Mobile backhaul
- Managed Services

#### Customer Benefits

- Scalable solution – cost-effective expansion with no downtime
- Backhaul designed in protected ring – simple rerouting with no outage
- Clear plan for future development.

#### Ericsson AB

SE-164 80 Stockholm  
Telephone: +46 8 757 0000  
Email: [asq.us@ericsson.com](mailto:asq.us@ericsson.com)  
[www.ericsson.com](http://www.ericsson.com)