

m:tel deploys **Alepo's Carrier WiFi** to launch cellular offload
and new public WiFi plans

The new service creation and advanced monetization capabilities enabled m:tel to significantly improve WiFi usage, and the reduced load on their cellular network lowered their operational costs.

Project Background

Bosnia and Herzegovina's leading telecommunications provider, joint-stock company Mtel a.d. Banja Luka trading as m:tel, offers a host of services on mobile, landline, internet, data, and IPTV networks. Along with prepaid and postpaid offerings for consumers, it also has a range of solutions for business users with calls and data on mobile and landline networks. In all, m:tel has over 1.6 million users.

The operator wanted to improve network capacity and coverage for its 3G and LTE networks by seamlessly offloading traffic to WiFi. It also planned to launch new WiFi offerings, granting both paid access with monthly plans and vouchers, as well as free access through different journeys such as social media login and watching promotional videos. Its legacy captive portal, however, could not support these new capabilities, so m:tel recruited Alepo, a global leader in delivering carrier-grade WiFi offload and monetization solutions.



Operator Requirements

The operator wanted to boost customer engagement and loyalty by revolutionizing the data experience. Its key requirements included:

- Reducing congestion on its 3G and 4G LTE networks with WiFi offload
- Providing automatic and transparent subscriber authentication to existing customers for instant connectivity while offloading
- Monetizing its WiFi network and rapidly creating innovative free and paid WiFi data offers and personalized promotions
- Offering easy payment options for prepaid and postpaid WiFi users; granting 30 minutes of free access to all users with social media login
- Deploying cost-effective and scalable
 WiFi hotspot infrastructure in Bosnia and
 Herzegovina without disrupting existing
 services
- Granting location-specific WiFi access using multilingual and custom-branded captive portals

Alepo's Solution

Alepo's Carrier WiFi helps m:tel efficiently manage its growing number of locations and affiliates, offering advanced monetization and offload capabilities. Subscriber authentication integrated with m:tel's core network ensures mobile customers seamlessly connect to WiFi



on purchasing the add-ons through a quick two-click process.

Prepaid users are able to use their mobile balance to buy WiFi offers; postpaid users' monthly invoices reflect the charges. Subscribers are granted WiFi access through location-specific multilingual captive portals. Alepo delivered the following components:

- Convergent and flexible AAA that provides seamless connectivity without requiring subscribers to repeatedly manually authenticate on the WiFi network.
- WiFi Service Management Platform (SMP) to create captive portals and extending the same capability to affiliates, who can also create their own hotspots with flexible revenue-share arrangements.

Solution Highlights

The operator was able to introduce innovative plans, maximizing its ROI while improving the customer experience. Highlights of Alepo's solution include:

Advanced monetization enabled m:tel to launch various services such as WiFi access to casual users, innovative location-based plans, segmented and personalized offers, as well as managing new wholesalers and mobile partners.

Multiple free and paid WiFi journeys to access the internet, including watching a promotional video, logging in with social media credentials, purchasing vouchers,

and subscribing to plans.

Consistent data experience through automatic subscriber authentication by seamlessly offloading mobile subscribers to WiFi wherever available.

Launch of a WiFi hotspot network in Bosnia and Herzegovina.

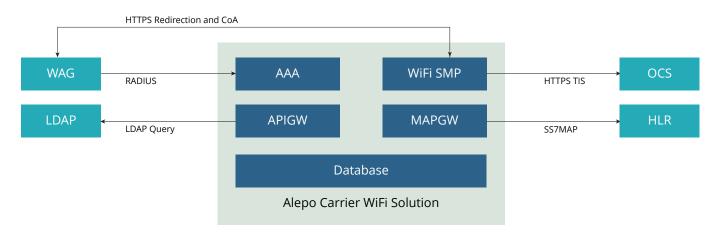
Cost-effective support for WiFi offload using the robust AAA infrastructure at m:tel and successful IoT with mobile core and WiFi vendors.

Custom-branded captive portals with location-based multilingual access to achieve brand engagement goals and improve brand loyalty for affiliates and sponsors.

Business Use Cases

Customer-centric business plans deployed for m:tel's prepaid, postpaid, and casual customers include:

- Auto bill adjustment for WiFi packs: for prepaid subscribers, the bill amount is deducted from their mobile account balance; for postpaid subscribers, it is added to the monthly invoice
- Single registration for users with both prepaid and postpaid accounts
- Voucher-based user registration from the captive portal for casual users
- 30 minutes of free internet with social media login



Solution Architecture



Project Outcomes

Reduced cellular load

The increased WiFi usage meant saving of cellular resources, resulting in reduced internal costs for the operator. Post-deployment, operational costs were substantially lowered.

Enhanced customer experience

In the absence of LTE data coverage, automatic WiFi offload provides consistent connectivity, with enhanced experience and increased data consumption for existing subscribers, while new subscribers can access the WiFi service in just two clicks. New subscribers accounted for

a large chunk of the total users in the first two months after deployment; supporting an important goal of m:tel to expand its audience reach.

Increased WiFi usage

Owing to the innovative new WiFi plans and seamless experience, m:tel's data usage increased significantly after deployment.

Flexible captive portal framework

Alepo's flexible WiFi SMP helps m:tel create custom captive portals for its affiliates and sponsors, and launch multiple WiFi journeys for subscribers, contributing significantly to the total WiFi revenue.

