



### **? Why Redknee**

**Boost Service Coverage** by taking advantage of every Wifi router **and win against OTT** by providing VoLTE/VoWiFi call quality that even exceeds that of 3G circuit switched voice.

**Improve customer satisfaction and loyalty** by providing seamless voice service irrespective of mobile access type with same high quality of user experience and reduced costs (i.e. roaming).

**Simple to Use** with native dialer and advanced functionality like personalized ringtones or announcements and 3-party calls.

**Reduce costs** through optimized network utilization using intelligent Wifi offload mechanisms.

**Improve operational efficiency and transparency** with a single, highly scalable and flexibly carrier-grade policy and charging platform.

## Wifi-Calling: How Redknee helps CSPs to compete against OTT

Offer Wifi-Calling to boost service coverage and to compete against OTT VoIP Service Providers with better call quality and shorter set-up times.

Redknee's real-time monetization platform enables Communication Providers to combine Wifi-Calling into value-adding service bundles, ensuring a high quality user experience and to support with its marketing and connected care capabilities smart promotions and customer support.

### › The Power of Wifi-Calling

Redknee believes that Wifi-Calling will move from a 'nice to have' service to a mandatory requirement over the next 2 years. Although smartphones and tablets are rapidly expanding the use of mobile broadband, voice services still remain one of the most important services and users expect a high quality service. Poor coverage, particularly in densely populated areas or indoors, often result in customer dissatisfaction and customer churn. Wi-Fi Calling now enables telecom customers to use every Wi-Fi router as their personal CSP antenna to make and receive mobile calls, furthermore to move between Wi-Fi and cellular networks without any interruption during the call. Thus, Communication Providers (CSPs) can easily improve their service coverage without having to set up more masts.

While Voice over Wi-Fi is not a new concept, the introduction of Wi-Fi Calling capable smartphones (i.e. from Apple, Samsung, Microsoft, LG, HTC and others) has boosted the interest in WiFi calling and will further drive the demand for it. Integrated in the native phone dialer of today's smartphones, Wifi-calling provides seamless user experience where users can keep their existing phone number, contact lists and can make calls and write texts as accustomed to via cellular networks. In addition, it provides advantages over VoIP in terms of faster call set-up times and better call quality, giving CSPs a competitive edge over VoIP OTT Service Providers.

Recent market reports confirm the promising market outlook, showing that Voice over Wifi will surpass Voice over LTE (VoLTE) by 2018 in terms of minutes used; one of the reasons: VoWiFi can also be delivered over non-SIM devices.

### › How Redknee brings Wifi-Calling to Reality

Redknee's policy management solution, Redknee PCS, combines industry leading technologies to support commercial Voice over Wifi and VoLTE services, with Tier 1 operator-proven methodologies to provide end-to-end QoS. The solution adjusts to the evolution of LTE and Wifi by supporting seamless service across multiple access networks and ensures



a smooth handover across Wifi and LTE network while also supporting pure Wifi calling environments. It provides advanced service functionality like simultaneous ringing on multiple devices, support for emergency or multimedia priority calls, personalized ringtones and announcement, network-based location and 3-party call support. By leveraging the Evolved PacketCore (EPC) QoS management and dedicated bearer support for non-IMS applications (e.g. Amazon, Netflix), Redknee PCS enables operators to offer zero-rating or differential charging of certain applications similar to sponsored data on Rx, but much simpler, while ensuring a high quality of experience to end customers.

Redknee PCS can be fully integrated with Redknee's powerful rating and charging solution, Redknee Unified, that additionally provides advanced real-time marketing and connected care capabilities; or can be tightly and agnostically integrated with operator's existing BSS/OSS systems.

### › **Monetize Wifi Infrastructure**

What's more, with its embedded 3GPP compliant ANDSF functionality, Redknee PCS allows service providers to profit from the widespread availability and adoption of Wifi access to extend the coverage of their cellular networks and to intelligently use the best access network at any given time for different types of data and subscribers. This innovative approach reduces the load on cellular networks, improves application and service performance, along with customer experience and opens up new business opportunities with the access CSPs now have to the vast market of general Wi-Fi enabled devices.

### › **A Proven Solution**

There are various ways how Service providers adopt and roll-out Wifi-Calling services. Redknee's real-time monetization platform empowers Service Providers to select the way that fits the best to their overall company strategy, customer base, competitive dynamics in their markets and the networks they have already deployed. Two exemplary case studies.

With Redknee's Policy Control Solution, PCS, Redknee has supported a leading Tier-1 service provider in Western Europe to offer both Wi-Fi calling and VoLTE as first operator in Europe at all. The same underlying infrastructure that previously delivered VoLTE service is also used to deliver the Wifi-calling service; whereas VoLTE is switched on by default while Wifi calling has to be enabled by the customer. Other service providers are adopting Wifi-calling first, with plans to deliver VoLTE service and invest in a 'full blown' IMS-based VoLTE infrastructure in a later stage. On that path, Redknee supported a T2 Service Provider in Europe as well to offer a seamless voice service irrespective of access type or end-device with same high quality and same customer experience as via operator's mobile network in home country with no extra fees or roaming costs.