

ITU-T Workshop

“Mobile Telecommunications and Fixed/Mobile Convergence – the realities going forward”

Abstract

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This document will mainly introduce Huawei company's view on wireless core network evolution

.After passing through the valley of 3G, the global 3G industry has stepped into the fast development stage. And UMTS has become the focus again in worldwide. By September 2003, there are only less than 5 million 3G users Worldwide. But now, this number has reached 23 millions. Especially, WCDMA grows much faster. Last year, there are less than 1.8m subscribers, 8 UMTS operators. And now, nearly 11m users, 19 Operators join in WCDMA group. There are more than 20 UMTS which are still being constructed

Started as a technology for 3G mobile networks, IMS is now spreading to Next-Generation network and is going to be a key for mobile/fixed convergence. In IMS stage, wireless network and fixed network will be converged.

As proverbs said “Rome was not built in a day”, the evolution of wireless network is a long-term process, and should be introduced step by step. The development of IMS services is also a process introduced step by step. To increase the revenues, Partial IMS application such as PoC, IM, Presence should be introduced first. Secondly, along with the maturing of IMS standard, real time IMS service such as VoIP, Video Call, Conferences, etc. will be deployed in the comprehensive IMS network.

In the long-term process, the major income of operator is continuously from traditional voice service. Therefore, CS will coexist with IMS for a long time.

Huawei consider that mobile soft switch is the effective means during the process of wireless core network evolution. Huawei regard circuit soft switch as the first step for mobile network convergence, and IMS as the second step for complete FMC. Wireless network evolution route, defined by 3GPP specification, has been adapted into GSM and fixed net field. Soft Switch was introduced by 3GPP in CS (circuit switch) domain and came into being in 1997. Because of its great advantages and future oriented features, Soft Switch become so popular and has been widely deployed all over the world within a short period of time.

Huawei mobile Soft Switch is designed for 2G expansion and new 3G services deployment simultaneously. On the other hand, because based on the same protocol such as SIP, H.248 are adopted, Huawei mobile Soft switch based CS equipment can be smoothly evolved to IMS equipment: MSC server evolved to MGCF and MGW evolved to IM-MGW.

For Mobile operator, mobile soft switch is the bridge to converge 2G and 3G, the bridge to promising IMS.