

ITU TELECOM WORLD 2009 In Review

to reduce cell sizes; therefore, additional load will be generated in terms of handover. GPS via satellite could help locate the user while reducing equipment and software related costs while making the antenna turn toward the right direction. As an effect, it enlarges service area, saves power consumption and possibly increases data transmission speed up to mega bits/s by using additional capacity transfer repeaters.

Because the approaches used to deal and agree on standards differ from one institution to another e.g. IEEE or 3GPP, it is too late to consider a merger of WiMax and LTE. However, it could make sense from an economic point of view to opt for software-defined radio to deal with possible minor differences between technologies if using a common basic technology. A coexistence of technologies often reflects the unwillingness to risk initial investment or the need to meet market-specific requirements.

With a possible trend towards flat rate pricing (for data services) it is crucial for operators to understand their own cost structures. It was a similar situation in the past with mobile voice services. Only a mass-market development would allow for a low pricing structure.

Panelists considered the issue of what use would be made of the 100Mbt/s data speed that could be enabled by WiMax or LTE? The most bandwidthconsuming application is video HDTV – however, this is still far from needing such a speed. Therefore, even though it could be necessary for communication between base stations, it definitely would not be a driver for services. The underlying driving forces would more likely be the cost reduction for service providers and the possibility of providing users with a similar experience on mobile to that which they can enjoy at home, without having to pay more.

If the current cellular network topology is to be changed, would a combination of satellite radio navigation systems in conjunction with cellular applications generate better efficiency e.g. by cutting cost and increasing capacity? This combination could be appropriate for use in developing countries, especially for providing Internet services, as there would be no sensitivity to delay. Indeed,