Software Defined Radio: Opportunities and Challenges of the Next Generation Platform for Mobile Communications

Description: Cellular? PCS? GSM? Gprs? CDma? Bluetooth? 802.11b? The standards battle for mobile wireless networks continues. So what will future wireless networks that are capable of providing true broadband connectivity to handheld devices actually look like? The truth just happens to be that it may not matter at all. The latest and greatest technology that has the potential to reshape the wireless world is not a standard in of itself (at least not yet), but rather a new platform called Software Defined Radio (SDR), which carries the ability to support any and all wireless standards simultaneously.

Sounds intriguing? It is. SDR is being touted as The future of wireless communications. The days of custom Asics and radio hardware may be numbered, giving way to a new era where upgrades and reconfigurations of wireless equipment requires only a new software load. SDR has the potential to open new business opportunities for carriers and cellular providers as well as the entire handset market. However none of these opportunities are expected to happen overnight. Several key development milestones are yet to be reached in order to move SDR technologies into the mainstream market. In this report, we examine the future opportunities for SDR technology on a worldwide basis, forecasting the market opportunity for both base stations and handsets in each region through the year 2008.

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