SoC – Fuelling the Hopes of the Mobile Industry
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Status. Supply and Demand in the mobile operator seem almost decoupled – New technologies and ever increasing bandwidths compete for the attention of CTO’s. On higher network layers, IMS and VoIP are key technologies shaking up the mobile value chain. New contenders, WiMax, WiFi, jointly with independent VoIP based operators threaten the value proposition of mobile altogether. Mobile technology is still evolving and the rate of innovation is high.
The marketing department, on the other hand, focuses on value creation, large bundles, simplified terminals, format competition, thereby slowly coming to terms with the likely reduction of ARPU. Marketing has to deal with all the features of a mature market. Surely, some experiments on mobile broadband propositions are being launched, for example Mobile TV, music download, browsing, but none of them has yet delivered significant ARPU contributions. Finally, mobile communications are mainly peer-to-peer communications, i.e. too much player differentiation implies limited ability to communicate, an effect that has significantly hampered e.g. the success of MMS.
The impact of all this on mobile terminals, specifically, is that diversity of requirements in terms of supported radio and coding standards, applications, speed and power efficiency increases dramatically. Operators will carry a high cost burden against a background of not yet amortized investment into licenses and network equipment.

Perspective. For Mobile operators to survive in this environment, cost-effectiveness and flexibility in adopting new services are key. Cost to Serve has to decrease while the quest for high-impact innovation continues. SoC can help to accomplish this by

• Enabling multi-mode terminals which seamlessly roam between multiple radio technologies and access standards at reasonable performance levels
• Decrease cost-to-serve further, to allow operators and terminal suppliers more pricing flexibility and to enter new business areas (e.g. machine-to-machine or developing markets)
• Increasing the degree of flexible control on the standardized service interface to enable easier and faster service development and innovation
• Create competition between radio standards unbundled from a coherent service experience, thereby e.g. introducing competition between different IPRs

As a consequence, the industry value chain may change with operators trying to establish even tighter control over system design and thereby bypassing terminal manufacturers and challenging the sources of value of key IPR holders.