



## FM Radios in Cell Phones

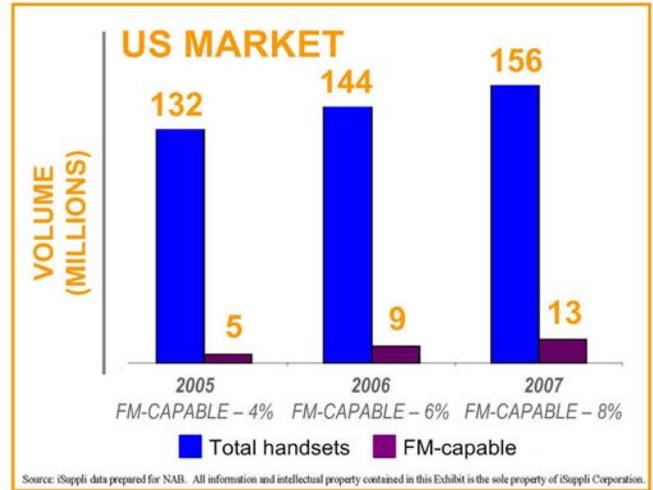
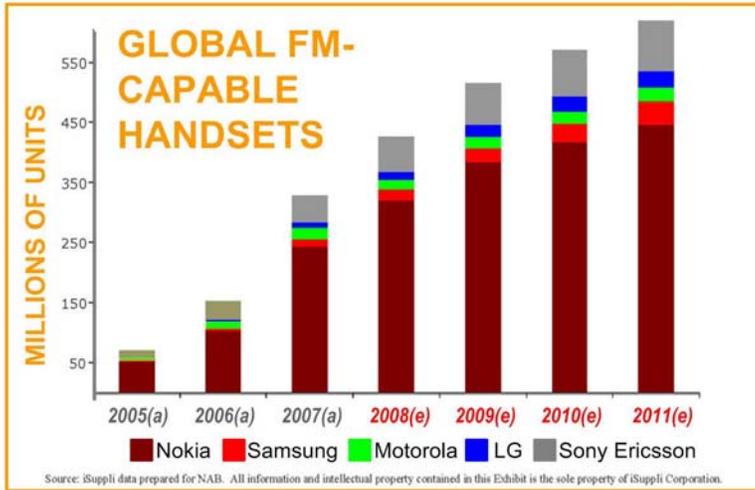
According to the latest figures, nearly 85% of the people in the U.S. have a cell phone, but while outside the U.S. about 34% of all cell phones have a built-in FM radio receiver, in the U.S. that number is only about 8% (see chart below, at right). A new report commissioned by the NAB technology advocacy program NAB FASTROAD (Flexible Advanced Services for Television & Radio On All Devices) outlines the potential benefits that could result from an increase in the penetration of FM radio receivers in cell phone handsets. This study concludes that cell phone service providers, radio broadcasters, and handset manufacturers all stand to benefit from the expansion of FM-capable cell phones.

The report, entitled "Study of the Potential for FM Radio to be a Universal Feature on Cellular Handsets," was authored by Dr. Joseph Kraemer of the Law and Economics Consulting Group (LECG) and Richard O. Levine of Constantine Cannon LLP. Some of the key facts contained in this study include the following:

- Cellular systems outside of the U.S. are more "open" and customers typically purchase their handset first and select a carrier second. Consequently, for these markets, cellular phone manufacturers include features such as FM receivers to differentiate their phones from others and attract customers to their products.
- In the U.S., the distribution of handsets is largely controlled by the cellular carriers themselves, who offer subsidized handsets in return for agreement to one- or two-year contracts. Last year, U.S. consumers purchased approximately 156 million handsets, which means that the embedded base of U.S. handsets turns over in less than two years and further, that if FM-capable cell phones became more readily available in the U.S., they could reach significant penetration in a similar period of time.
- Worldwide the Global System for Mobile Communications (GSM) cell phone standard is predominant, while in the U.S. the market is nearly evenly split between two incompatible systems, GSM (used by AT&T and T-Mobile) and Code Division Multiple Access (CDMA) technology (used by Verizon and Sprint). Further, most of the FM-capable cell phones in the U.S. are GSM phones, which is a consequence of the global GSM predominance and the fact that the demand for FM-capable cell phones is greater outside the U.S.
- Most of the FM-capable handsets are made by Nokia and Sony Ericsson (see chart at left) but in the U.S., Nokia is only fourth in terms of total handset sales (but number one globally) and Sony Ericsson is not in the top five, which helps to explain why there are fewer FM-capable cell phones in the U.S. Nokia offers 47 different cell phone models (out of 67, or 70%) in the U.S. which include FM receivers.



Benefits to be obtained by inclusion of FM receivers in cell phones include increased cellular service subscriber satisfaction, ad-sharing opportunities, and reduced-cost on-air cellular promotions. The report also notes that cellular operators are increasingly dependent on revenue from non-voice services, including music downloads. The implementation of FM receivers on cell phones could provide a boost to music downloads, the report suggests, by facilitating "tagging" of songs heard on the FM receiver for later purchase. FM receivers would also give cell phone users access to the Emergency Alert System (EAS) announcements that are relied upon as a lifeline for Americans during emergencies.



A potential catalyst for broadcaster/cellular network provider partnerships identified in the report is the pending implementation of the Commercial Mobile Alert System (CMAS) as recently defined by the FCC in a *Report and Order* adopted by the Commission in April of this year. A number of commenters in that proceeding have suggested an FM radio-based solution to the CMAS requirements, which would require the inclusion of FM receivers in cell phone handsets.

The full text of the report and information on the NAB FASTROAD technology advocacy program are available at [www.nabfastroad.org](http://www.nabfastroad.org).



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