

(Continued from page 26)

different standards bodies differentiate themselves in the market — through the core competency of the organization or technology focus, the openness of their standards and rules governing intellectual property, differences in national affiliation, and so on.

With multiple competing businesses working through multiple competing standards bodies, the logical result is that there are multiple competing standards, furthering the proliferation of standards within the wireless community. There are numerous examples of this. For instance, both OBSAI and CPRI have developed standards for the interface between the RF front-end and the baseband processing in a cellular base station. More famously, the Standards Administration of China developed a standard supporting security in wireless local area networks that competed directly with the standards developed by the IEEE 802 Committee [5]. This issue was widely publicized in 2003–2004 because of the

perception that it would force companies developing wireless LAN technology to license the associated intellectual property from the companies in China that developed it. The wireless companies would then have to support multiple technologies in their products — one set for China and another set for the rest of the world — which would, in turn, increase their overall costs and limit their ability to differentiate in other areas.

This specific issue is indicative of what the proliferation of standards means to the wireless development community: engineers and product managers developing wireless technologies and products often need to be up to speed on a lot of different standards in order to do their jobs. This, of course, leads back to the original question: “does the wireless community really need all of these standards?” If one takes a short-term view, the answer is usually no. Multiple companies supporting multiple, often competing, standards have the opposite effect of commoditizing the technolo-

gy. Instead, it diversifies the technology, driving up costs and confusing the market as to which standards will emerge victorious. Companies thus differentiate on the standards they support, not on the value of the other innovative features in their products and solutions.

In the long term, however, I believe the answer is yes. Standards are created because there are business cases behind them sufficient to entice companies and individuals to invest their time participating in the standards process. A proliferation of standards therefore means that there is a proliferation of business interests. Having multiple standards supporting these different business interests provides wireless technology developers and OEMs with choice: of which standards to adopt in supporting their target markets and in supporting the evolution of those standards over time. This level of choice naturally breeds competition, and thus forces standards to evolve to best meet the needs of the market. Case in point: imagine what the evolution of cellular data standards would look like today if there had not been competing wireless networking standards from the IEEE 802 committee developed over the last several years. The more standards available, whether they are competing or complementary, the greater the choices for the market, and thus the greater the chance the market will have access to the best technologies to suit its needs. Ideally, over time a single set of standards will emerge as the “standards of choice” within a given market. Thus, the proliferation of standards in the long term fosters competition, lowers prices to consumers, and allows for innovation in other areas.


REFERENCES

- [1] OBSAI, “About OBSAI,” <http://www.obsai.org/obsai/obsai/about>
- [2] OBSAI Press Release, “Telecommunications Companies Sign Up for Open Base Station Initiative Set to Bring More Innovative and Cost-Effective Base Stations to Mobile Operators,” http://www.obsai.org/obsai/media_relations/media_releases/021002_leading_telecommunications_companies_sign_up_for_open_base_station
- [3] S. M. Pereira, Standardizing Digital IF Data Transfer with VITA 49, *RTC Mag.*, Jan. 2006, <http://www.rtc magazine.com/home/article.php?id=100460>
- [4] Nokia Press Release, “Nokia Asks Delaware Court to Enforce Qualcomm’s Contractual Obligations in Essential Patent Licensing,” <http://webwire.com/ViewPressRel.asp?SESSIONID=&ald=18170>
- [5] Sumner Lemon, “Controversy over Chinese WLAN Standard Deepens,” *Info World*, Dec. 2003, http://www.infoworld.com/article/03/12/10/HNchinesecontroversy_1.html


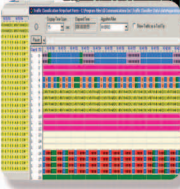


GL Communications Inc.

301-670-4784 * info@gl.com * www.gl.com



Traffic Classifier

- Provides a real-time snapshot of your T1 E1 network activity.
- Analyze and classify various traffic such as voice, fax, data, tones, digits and other events.
- Uses various identifying schemes depending on the country of choice and classifies the traffic, based on the dialing tones stipulated for that country.
- Network surveillance for extended periods by recording the classification results for days, weeks or months at a time.
- Data and fax modulations such as V.22, V.34, V.29, V.32, and V.27 are supported as traffic types.
- Four algorithm options (Linear, quadratic, hybrid and hybrid filtered) to fine-tune the classification results.