



For Immediate Release

OMG and The SDR Forum Release Smart Antenna Specification

Innovative specification the first joint release for the two non-profit member consortiums

WASHINGTON, DC, May 5, 2009 – The release of a standard defining interfaces and APIs for a unified architecture among smart antenna vendors was announced by the [Object Management Group](#) (OMG™) and [The SDR Forum](#) today. The “*PIM and PSM for Smart Antenna Specification*” is the first joint standard released by the groups, both of which are non-profit member organizations that produce industry specifications –OMG in the computer industry and The SDR Forum in the reconfigurable radio industry.

“Because smart antennas combine both the computer and reconfigurable radio communities, it was an ideal subject matter for collaboration,” said Lee Pucker, CEO of The SDR Forum. “We expect this to be the first of many joint specifications carried out between The SDR Forum and OMG.”

“This specification is extremely important for software radio interoperability and portability, not just for initial adopters like the military, but also for broader commercial applications such as cellular telephony,” said Richard Mark Soley, Ph.D., chairman and CEO, OMG. “The successful completion of this specification adoption process shows how well OMG and the SDR Forum worked together to get high-quality, critical standards done quickly.”

A smart antenna is an antenna array system that is aided by a processing system that processes the signals received by the array or transmitted by the array using suitable array algorithms to improve wireless system performance. A software defined smart antenna is a smart antenna in which certain operating characteristics, such as the field of regard, frequency of operation, access mode, or transmit/receive waveforms can be altered by firmware or software download after its manufacture.

“The Smart Antenna specification standardizes the set-up, dataflow and control of multi-antenna platforms supporting beam forming, direction finding and multiple-input/multiple-output (MIMO) applications,” said Dr. Seungwon Choi of Hanyang University in Korea and Chair of the SDR Forum Smart Antenna Work Group. “This new API will facilitate the formation of an ecosystem of vendors supporting a unified architecture for smart antenna technologies, providing telecommunications equipment manufacturers, radio vendors and network operators in multiple segments of the market with a cost effective tool for optimizing signal quality, capacity and coverage.”

The Smart Antenna specification is comprised of three major components:

- The Unified Modeling Language™ (UML®) Profile for Smart Antenna (SA), which defines a language for modeling a smart antenna system by expanding the UML language,
- The SA Platform Independent Model (PIM), which provides a set of interfaces for interfacing with the signal processing module, RF module, and controller module, and
- The SA Platform Specific Model (PSM), which provides a rule for transforming the elements of the profile and SA PIM into the platform specific model for Common Object Request Broker Architecture (CORBA®) interface definition language and XML.

The specification is available online at http://sdrforum.org/pages/documentLibrary/documents/SDRF-07-S-0016-V2_0_0_OMG_Smart_Antenna.pdf. and <http://www.omg.org/spec/smartant/>.

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About OMG

OMG is an international, open membership, not-for-profit computer industry consortium that in 2009 is celebrating its 20th Anniversary. OMG Task Forces develop enterprise integration standards for a wide range of technologies, including: Real-time, Embedded and Specialized Systems, Analysis & Design, Architecture-Driven Modernization and Middleware and an even wider range of industries, including: Business Modeling and Integration, C4I, Finance, Government, Green Computing, Healthcare, Insurance, Legal Compliance, Life Sciences Research, Manufacturing Technology, Robotics, Software-Based Communications and Space.

OMG's modeling standards, including the Unified Modeling Language™ (UML®) and Model Driven Architecture® (MDA®), enable powerful visual design, execution and maintenance of software and other processes, including IT Systems Modeling and Business Process Management. OMG's middleware standards and profiles are based on the Common Object Request Broker Architecture (CORBA®) and support a wide variety of industries.

More information about OMG can be found at www.omg.org. OMG is headquartered in Needham, MA, USA.

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About The SDR Forum™

Established in 1996, The SDR Forum™ is a non-profit international industry association with a 100+ strong membership comprised of world class technical, business and government organizations from EMEA, Asia and the Americas who are passionate about creating a revolution in wireless communications based on reconfigurable radio. The SDR Forum is the only organization in the world dedicated to serving the industry's needs through advocacy, opportunity development, commercialization and education. For more information, please visit www.sdrforum.org

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