

## About ETSI

RRS is part of ETSI – one of the world's leading standards development organizations for Information and Communication Technologies (ICT). Founded initially to serve European needs, ETSI has grown rapidly to become highly-respected as a producer of technical standards for worldwide use.

ETSI membership is composed of manufacturers and network operators – all the “big names” and many smaller companies too – plus national administrations, ministries, regulators, universities, research groups, consultancies and user organizations. A powerful and dynamic mix of skills, resources and ambitions, all working together to bring the very best ICT solutions to the global marketplace. Geographically, our membership of over 700 companies and organizations is drawn from more than 60 countries on 5 continents.

ETSI is independent of all other organizations and structures, a key feature for ensuring neutrality and trustworthiness. That brings benefits not only in the acceptance of our standards and other publications, but also in our growing range of ancillary services, such as interoperability testing. And because standardization inevitably draws upon the bright ideas of our members, we have an Intellectual Property Rights (IPR) policy in place that has become the model for many other organizations.

ETSI's standardization activities are open to all interested companies and organizations. Your company can be part of this dynamic organization. For more information about how *you* can be involved, please visit

<http://www.etsi.org/membership>

For details about ETSI's current RRS activities, please visit

<http://portal.etsi.org/rrs>

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# Reconfigurable Radio System

## About Reconfigurable Radio Systems

Reconfigurable Radio Systems (RRS) are based on technologies such as SDR (Software Defined Radio) and CR (Cognitive Radio) whose systems exploit the capabilities of reconfigurable radio and networks for self-adaptation to a dynamically-changing environment with the aim of ensuring end-to-end connectivity.

With the development of technology, Software Defined Radio equipment is gaining increasing interest for use in radio networks as the equipment cost penalty is decreasing whilst equipment lifetime is getting longer.

In some markets such as national security and public safety, there is a requirement for longer equipment lifetimes which might be met by the use of SDR.



## RRS in ETSI

ETSI is strongly committed to supporting such innovation and has recently created an RRS Technical Committee. Our work on RRS complements our existing, extensive commitment to radio standardization, covering many different technologies and application areas, and our contributions to radio spectrum policy.

The committee's activities include studies on the feasibility of RRS standardization, collecting and defining RRS requirements, identifying gaps where existing standards do not fulfil those requirements and proposing solutions to fill those gaps.

The work is being focused on functional architectures for SDR, Cognitive Radio and resource optimization, SDR-based handsets and radio base stations, and the role of RRS in the domains of public safety and defence. Given the diversity of ways in which RRS are expected to be used, a key aspect will be ensuring that different and independently standardized radio stacks can operate simultaneously under a common SDR control framework.

ETSI's RRS Technical Committee has four working groups:

- RRS 01 System aspects
- RRS 02 Radio Equipment Architecture
- RRS 03 Functional Architecture and Cognitive Pilot Channel
- RRS 04 Public Safety

