

About ETSI

ORI 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>

and <http://www.etsi.org/isg>

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

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

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World Class Standards

Open Radio Equipment Interface

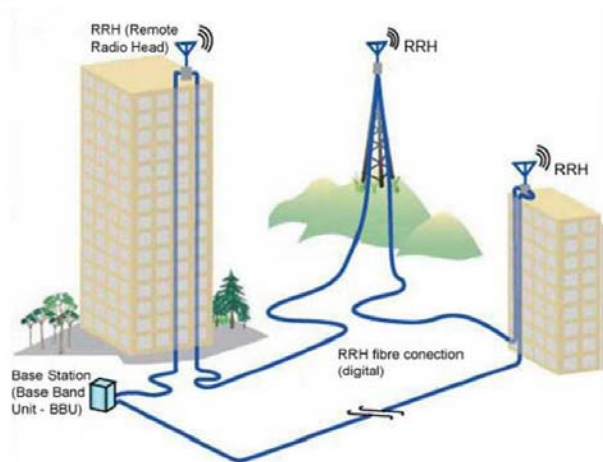


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Open Radio Equipment Interface

In May 2010, a new *ETSI* Industry Specification Group (ISG) was created to develop an interface specification enabling interoperability between elements of base stations of cellular mobile network equipment. This *ETSI* ISG on Open Radio equipment Interface (ISG ORI) is specifying an open interoperable interface for Radio Equipment in distributed mobile cellular base stations – GSM™, UMTS™ and LTE™.

In general, mobile radio base stations consist of a Base Band Unit (BBU) and a Radio Equipment (RE), which, in a distributed base station architecture, is a Remote Radio Head (RRH) or Integrated Active Antenna.



Use of distributed Radio Equipment can lead to significant cost savings for a mobile operator, especially when the connections are by fibre, as well as offering a greater level of flexibility in network design and deployment. This can also help reduce the visual impact of the installations.

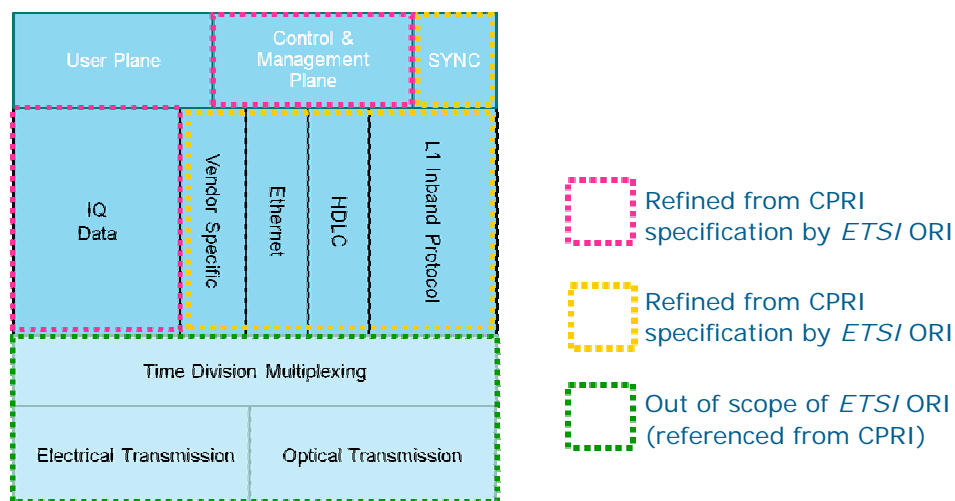
In such schemes, further benefits can be realised by the establishment of an open interface between the base station (BBU) and the remote equipment (RRH). An open interface enables operators to source the base stations and remote equipment from different vendors, helping to avoid “lock-in” to a specific supplier and permitting a more rapid response to operational demands and market opportunities. Additionally, such an interface allows flexibility in equipment upgrades, as just one part of an implementation may be replaced, rather than both ends, and valuable investments can thus be maintained over a longer depreciation period.

Standardised interfaces also facilitate testing and troubleshooting, and reduce development effort for test equipment suppliers.

The *ETSI* ORI Industry Specification Group

The interface which is being defined by the Industry Specification Group is an important step towards realising these benefits through widespread deployment of distributed Radio Equipment for mobile communication networks.

The specification that the group is preparing covers those layers of the OSI stack required to enable interoperability, and may refer to appropriate publicly available specifications. The interface is built on top of an interface already defined by the CPRI (Common Public Radio Interface) group. However, options are removed and functions are added with the objective of making the interface fully interoperable.



The *ETSI* ORI Industry Specification Group is a direct result of requirements work undertaken by the NGMN Alliance, in their OBRI (Open BBU RRH Interface) project. The ISG is strongly supported by the NGMN Alliance, and leading mobile network operators and telecommunication equipment vendors are among the ISG’s founding members.

ISGs supplement *ETSI*’s conventional standards development process and provide a mechanism for the speedy preparation of technical requirements or specifications for well-defined, specific issues, typically in response to a need expressed by a subset of the *ETSI* membership.

Membership of the ORI group is open to *ETSI* members and other companies who agree to sign the relevant ISG Agreement.