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Sharing analysis in a live LTE network in the 2.3-2.4 GHz band: compliance regulatory and technical results.

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The Italian Administration, in collaboration with the Joint Research Centre of the European Commission and the support of a consortium of industrial partners, has been first in the world to promote and organize a large scale LSA Pilot, under the technical coordination of Fondazione Ugo Bordoni. The pilot delves deeper on the role that spectrum sharing has for the efficient use of spectrum. The pilot implements a distributed control architecture in compliance with CEPT and ETSI provisions. This contribution is focused on the verification of both the technical feasibility and regulatory compliance of the Licenced Shared Access (LSA) technique applied to a real, live LTE network in the 2.3-2.4 GHz band. Both functional tests and regulatory compliance tests have been performed during the pilot. Measurements results show the sharing based on LSA is feasible to provide mobile broadband service in the 2.3-2.4 GHz band without detriment to incumbent service.

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