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Research Article

Interactive Digital Terrestrial Television: The Interoperability Challenge in Brazil

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Abstract

This paper introduces different standards implemented in existing Digital Terrestrial Television Broadcasting systems to allow the fruition of interactive services and applications through digital Set Top Boxes. It focuses on the interoperability issue between the Brazilian and the European architectures. In fact, despite in Brazil the GEM specification has been designed to foster wide content compatibility across a range of interactive platforms, it has never come to a final implementation and deployment. As a result the interoperability issue has been deeply explored in the BEACON project and an innovative system architecture has been developed to deploy t-learning services across Europe and Brazil, providing integration of those systems that were not able to interoperate until nowadays. This work is an important step in the direction of standards' interoperability. As a result, MHP and Ginga NCL-Lua implementation appeared to be the very best choice to deliver interactive services in an interoperable mode between European and Brazilian digital television.