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ABSTRACT:

This chapter provides an overview on European Telecommunications Standards Institute (ETSI) activities related to opportunistic spectrum sharing technology with a specific focus on (TV) white spaces. Key use cases are outlined and a novel approach for a coordinated and an uncoordinated approach for accessing the spectrum resource is given. A spectrum coordinator is indeed introduced in order to handle resource management. Furthermore, database system design and inter-database communication solutions are discussed as they are introduced by ETSI. Finally, various sensing mechanisms are detailed, which allow to monitor the radio environment and to feed decision-making components correspondingly.