Cooperative Cyber-Physical Systems (Co-CPSs) can be enabled using wireless communication technologies, which in principle should address reliability and safety challenges. Safety for Co-CPS enabled by wireless communication technologies is a crucial aspect and requires new dedicated design approaches. In this paper, we provide an overview of five Co-CPS use cases, as introduced in our SafeCOP EU project, and analyze their safety design requirements. Next, we provide a comprehensive analysis of the main existing wireless communication technologies giving details about the protocols developed within particular standardization bodies. We also investigate to what extent they address the non-functional requirements in terms of safety, security and real time, in the different application domains of each use case. Finally, we discuss general recommendations about the use of different wireless communication technologies showing their potentials in the selected real-world use cases. The discussion is provided under consideration in the 5G standardization process within 3GPP, whose current efforts are inline to current gaps in wireless communications protocols for Co-CPSs including many future use cases.