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Service-Oriented Performance Considerations for Remotely Piloted Aircraft Systems Traffic Management

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Abstract: This paper considers Unmanned Aircraft Systems (UAS) Traffic Management system from a service-oriented architecture point of view and proposes a framework for its performance requirements. The architecture specifically considered is related to the Remotely Piloted Aircraft Systems (RPAS) Traffic Management that is adapted by Transport Canada, in close collaboration with other jurisdictions in the United States and European Union. First, the functional performances for each individual service that comprises the Traffic Management system are defined here, and then quantitative parameters to gauge the performances of individual services are proposed.

Keywords: UAV, drone, UAS, traffic management, UTM

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