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TRANSPORT CANADA COMMENTS ON SMSE-019-17

Reference; ISED Consultation on the Technical, Policy and Licensing Framework for Wireless Microphones SMSE-019-17 November 2017.

Transport Canada Flight Standards has reviewed SMSE-019-17, and understands the risk for potential disruption of air navigation facilities and aircraft operation that could result from the use of wireless microphones in the 960 – 1164 MHz frequency band. Transport Canada further notes and appreciates the current position of ISED in the referenced Consultation that deployment of wireless microphones in the 960 – 1164 MHz band is not currently being consideration by Canada.

In regard to the complex operation of civil aviation air navigation facilities and their criticality to the air transport industry, Transport Canada provides the following comments for consideration:

- The 960 – 1164 MHz frequency band is extensively used for navigation and surveillance functions on a worldwide harmonized basis by systems that are standardized by the International Civil Aviation Organization (ICAO), these systems include DME, UAT, SSR, MLAT, ADS-B, TCAS etc. Interoperability and compatibility of these systems is achieved by adherence to the Standards and Recommended Practices of ICAO.
- The frequency band is also utilized by non-civil systems that are designed to be compatible and interoperable with the civil air navigation systems. These systems are integral components commonly implemented as part of Canada's alliance with NATO.
- Under the Convention of ICAO, States are obligated to implement a State Safety Oversight Program, which reflects the requirements of Annex 19 to the ICAO Convention as a means to establish a safe Air Traffic Management system infrastructure.

- Safety case assessments are done to establish an acceptable level of safety and identify potential risks in the Air Traffic Management infrastructure that would include airspace usage, airport precision approach, RNAV procedures and PBN, all of these air navigation components are dependent on the operation of navigation systems operating in the 960 – 1164 MHz frequency band.
- It is important to point out, that any implementation of wireless microphones in the 960 – 1164 MHz band would change the RF operating environment of the air navigation systems that would, in turn, require the safety case assessments to be re-established in order to identify potential risks to the ATM infrastructure and aircraft operations.
- The competent authorities to perform safety case assessments are the Air Navigation Service Providers (ANSP's), and the State Civil Aviation Authority.

Transport Canada Flight Standards is pleased to have the opportunity to review the Consultation SMSE-019-17 and provide comments in regard to the potential implementation of a non-safety of life service being licensed to operate in a very congested safety of life aeronautical frequency band, wherein the air navigation services operating in the 960 – 1164 MH band are absolutely critical to the safe operation of Canada's air transportation industry.

As summarized in the above comments, it can be understood that re-assessment of safety cases for the airspace infrastructure due to any future consideration of wireless microphone use in the 960 – 1164 Mhz frequency band, would neither be a practical or cost acceptable situation for the air transportation industry.

In closing, any questions can be directed to the undersigned, or to Mr. John Taylor at john.taylor@tc.gc.ca

Yours truly,



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