Mr. Martin Proulx  
Director General, Planning and Standards Branch  
Spectrum, Information Technologies and Telecommunications Sector,  
Innovation, Science and Economic Development Canada

Dear Mr. Proulx:


Transport Canada Civil Aviation is pleased to respond to the three questions posed in the consultation as below:

A. the demand for and benefit, if any, of allowing HPODs in the 5150-5250 MHz frequency band?

Transport Canada sees no urgency to implement HPOD’s prior to WRC-19 in the 5150-5250 MHz band, ahead of the timeframe needed for completion of technical studies and agreement of international regulations at the ITU under WRC-19 Agenda Item 1.16. An aviation standards body is currently developing technical operating criteria for airborne systems that will be used to support Unmanned Aircraft Systems. These systems will use ARNS allocations under 4.10 of the Radio Regulations, one of these ARNS allocations happens to be in the 5150-5250 MHz band.

B. the potential impacts on domestic and foreign satellite systems in the 5150-5250 MHz frequency band of authorizing HPODs use prior to WRC-19 on the basis of a maximum e.i.r.p of 4W. Requirements for an evaluation mask towards satellites and an exclusion zone of 25 km around receiving earth stations to protect all satellite systems would likely also apply. ?

Transport Canada notes that permitting the use of HPOD’s at an EIRP of 4W, multiplied by the number of deployments, could cause an increase in the aggregate noise level seen by a satellite receiver, and thus impact network capacity and availability. Transport Canada also expresses concern on the future sustainability of the 5150-5250 MHz band under an unlicensed regime with no regulatory control over deployment levels.

C. should the Department proceed to authorize HPODs use prior to WRC-19, what regulatory approach would best ensure a balance of timely deployment and the protection of other existing and futures services in the 5150-5250 MHz frequency band? Also, indicate any and all considerations that should be given to equipment standards, technical requirements, eligibility criteria and/or conditions of licence depending on the relevant approach. ?
Transport Canada favors a licensed approach that is based on agreed ITU regulations resulting from completed technical studies under WRC-19 Agenda Item 1.16. Accordingly, licensing can reference the technical operating criteria as a necessary regulatory mechanism to control emissions in the 5150-5250 MHz band, and also to ensure that any out of band emissions below 5150 MHz do not impact adjacent primary aeronautical services operating in the 5091-5150 MHz band.

Transport Canada Civil Aviation appreciates the opportunity to respond to this important notice.

Sincerely,

[Signature]

Aaron J. McCrerie
Director General
Aviation Safety Regulatory Framework
Civil Aviation