National Radio Astronomy Observatory
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Re: SAT-LOI-20160428-0004 Request for Declaratory Ruling Granting Access to the U.S. Market for the OneWeb system by WorldVu Satellites Limited

Opposition of the National Radio Astronomy Observatory

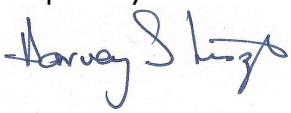
The National Radio Astronomy Observatory (NRAO) is concerned that WorldVu has not shown, even most tentatively, that operation of the OneWeb system can protect radio astronomy operations in the spectrum bands immediately adjacent to and below the planned FSS downlink at 10.70 GHz – 12.75 GHz. Of especial concern is the passive service band at 10.68 – 10.7 GHz.

NRAO is grateful to have received a printed notice of the Request from WorldVu and its counsel at Wiley Rein. However, with that exception, NRAO has not had any contact with this FSS operator since recommending in May 2016 that they retain the services of a particular expert to conduct epfd simulations of the impact upon radio astronomy of the OneWeb constellation. Heavy filtering, and perhaps other operational means, will be needed to lower out of band emissions from the FSS downlink to levels that would protect radio astronomy operations in the adjacent passive service band.

Also of concern is the lack of consideration regarding the need to protect remote sensing operations that use the 10.68 – 10.7 GHz passive band for global climate measurements.

NRAO therefore requests that authority to operate the OneWeb system not be given until such time as the protection of radio astronomy and remote sensing operations in the adjacent band just below 10.7 GHz are assured.

Respectfully submitted



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