

Minor Modification to Add New Generation Outdoor Electronics to Existing Antenna

This modification addresses the implementation of a new generation outdoor electronics unit to an existing antenna in earth station license E050033. The new outdoor electronics, which Viasat calls a TRIA, or transmit / receive interface adaptor, is a form fit function replacement for the existing TRIA but also offers newer capability.

The existing TRIA has a maximum power output of 2.8 W and operates with symbol rates between 400 kBd and 5 MBd symbol rate. The maximum EIRP of the existing antenna / TRIA combination is 48.8 dBW and clear sky EIRP densities range from 27 dBW/4 kHz to 17.9 dBW/4 kHz.

The new TRIA has a maximum output of 7.1 W and is capable of operating with symbol rates between 5 MBd and 160 MBd but will be limited to a maximum of 80 MBd when operating on the WB-1 and Anik-F2 satellites. The maximum clear sky EIRP density will be limited to 20 dBW/4 kHz.

While the 80 MBd emission supported by the new TRIA does represent an increase in the individual carrier bandwidth from that supported by the existing TRIA, operation of a carrier with this bandwidth will replace a number of existing carriers operating with narrower bandwidth resulting in a net change of zero and the new carrier will operate entirely within the existing authorized bandwidth for the license. Additionally, the EIRP density of the new carrier will be lower overall than that of the older generation carriers it replaces.

Because Viasat is not adding a new antenna type, just replacing the outdoor electronics with a form fit function equivalent, and because there is no net increase in allocated bandwidth or EIRP density, Viasat is requesting this be considered a minor modification of the existing license.