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| U.S. Radiocommunications SectorFact Sheet |
| **Working Party:** ITU-R WP1A | **Document No:** USWP1A-01\_Res.731studies\_FS |
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| Document Title: On terrestrial Fixed Service emission limits necessary to protect EESS to RS.2017 protection levels for Res. 731 studies |
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| **Purpose/Objective:** WRC-19 Res. 731 requested ITU-R studies on potential sharing and adjacent band compatibility between passive and active services above 71 GHz. This contribution will consider the high dependency of uplink path propagation loss to path elevation angle at these frequencies. This model can then be used to calculate possible limits for high elevation angle sidelobe EIRP to protect EESS stations from harmful interference.  |
| **Abstract:** Building on the P.676-11 and P.525 propagation methods are developed for computing the incidental illumination of EESS systems by sidelobes of terrestrial Fixed Service systems with low elevation angle paths. This method could then be used to develop EIRP limits for high elevation angle emissions as a possible method to meet interference-free sharing objectives of Res. 731. Both individual and cumulative signal strengths from such uses are considered in the context of meeting RS.2017 protection limits. |