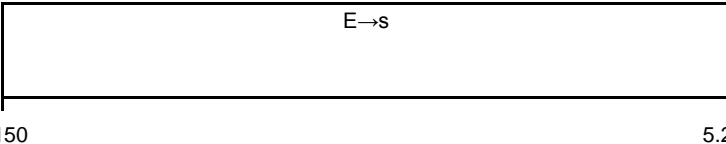

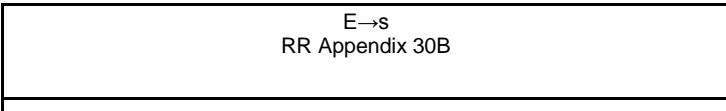


# **UK Frequency Allocations for Satellite Earth Stations**

**OfW 241**

**July 2017**

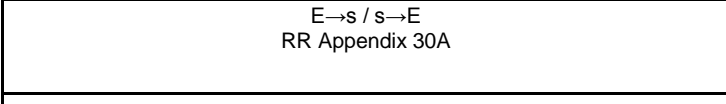
## Transmit Allocations


5 GHz	Applications	Licence Products	Other Information
 <p>5.150 5.250</p>	<p>This band may only be used for MSS NGSO feeder links.</p>	<p>Satellite (Permanent Earth Station).</p>	
6 GHz	Applications	Licence Products	Other Information
 <p>5.725 5.850 6.725 7.025 7.075</p>	<p>Mainly used for intercontinental television contribution, telephony and digital business links.</p>	<p>Satellite (Permanent Earth Station).  Satellite (Transportable Earth Station): 5.925 - 7.075 GHz.</p>	<p>Requires coordination with terrestrial fixed links in the band 5.850 - 7.075 GHz.</p>
13 GHz	Applications	Licence Products	Other Information
 <p>12.75 13.25</p>	<p>12.75 - 13.25 GHz is primarily used for uplinks to satellites offering commercial TV and interactive services.</p>	<p>Satellite (Permanent Earth Station).</p>	<p>Requires coordination with terrestrial fixed links.  Use of the band within the M25 and other major conurbations is not generally feasible because of extensive fixed link use.</p>

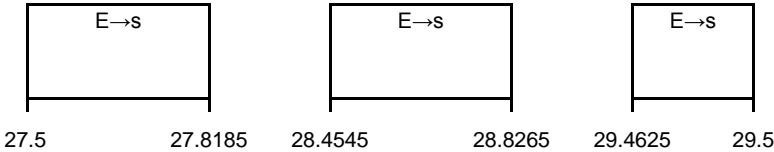
14 GHz	Applications	Licence Products	Other Information
<p>13.75 14.0</p>		Satellite (Permanent Earth Station).  Satellite (Transportable Earth Station): 13.78 - 14.0 GHz.	A minimum antenna diameter of 1.2m applies.  Use of this band by the FSS is subject to compliance with Radio Regulation footnotes 5.502 and 5.503.

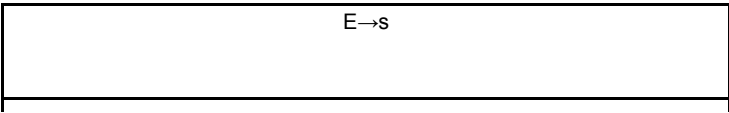
14 GHz	Applications	Licence Products	Other Information
<p>14.0 14.25</p>	Mainly used for low density carriers, including VSATs and TESSs.	Satellite (Permanent Earth Station).  Satellite (Transportable Earth Station).  Satellite (Earth Station Network).	

14 GHz	Applications	Licence Products	Other Information
<p>14.25 14.5</p>		Satellite (Permanent Earth Station).  Satellite (Transportable Earth Station).	Requires coordination with terrestrial fixed links.

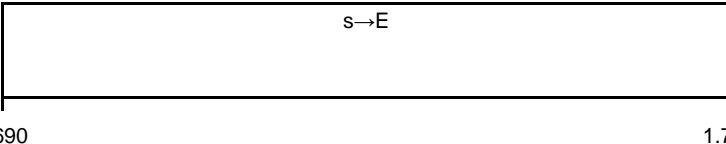
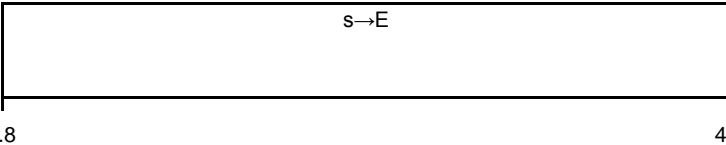

17 GHz	Applications	Licence Products	Other Information
 <p data-bbox="241 469 286 488">17.3</p> <p data-bbox="965 469 1010 488">17.7</p>	<p data-bbox="1066 320 1283 368">Limited for use by BSS feeder links (E→s).</p> <p data-bbox="1066 400 1283 496">Also available for earth station receivers (e.g. VSAT/HDFSS) on an uncoordinated basis.</p>	<p data-bbox="1312 320 1529 368">Satellite (Permanent Earth Station).</p>	<p data-bbox="1581 320 2040 392">Requires coordination with a few terrestrial fixed links associated with cable TV systems in the Channel Islands.</p> <p data-bbox="1581 424 2040 472">Subject to RR Appendix 30A and paired with the BSS downlink band 11.7 - 12.5 GHz.</p>

18 GHz	Applications	Licence Products	Other Information
 <p data-bbox="241 780 286 799">17.7</p> <p data-bbox="667 780 712 799">18.1</p> <p data-bbox="965 780 1010 799">18.4</p>	<p data-bbox="1066 633 1283 729">17.7 - 18.4 GHz use as an uplink band is limited to use by BSS feeder links.</p> <p data-bbox="1066 761 1283 857">Also available for earth station receivers (e.g. VSAT/HDFSS) on an uncoordinated basis.</p>	<p data-bbox="1312 633 1529 681">Satellite (Permanent Earth Station).</p>	<p data-bbox="1581 633 2040 657">Requires coordination with terrestrial fixed links.</p> <p data-bbox="1581 689 2040 737">Subject to RR Appendix 30A and paired with the BSS downlink band 11.7 - 12.5 GHz.</p>

28 GHz	Applications	Licence Products	Other Information
 <p>27.5                  27.8185      28.4545                  28.8265      29.4625                  29.5</p>		<p>Satellite (Permanent Earth Station).</p> <p>Satellite (Transportable Earth Station).</p> <p>Satellite (Earth Station Network).</p>	<p>Note: In addition to the licence products listed in the previous column, satellite earth stations meeting Interface Requirement 2066 are exempted from licensing (see Statutory Instrument 2010 No.2512).</p> <p>Spectrum between the three bands shown (i.e 27.8285 - 28.4445 GHz and 28.8365 - 29.4525 GHz) has been awarded on a technology and service neutral basis, including use by the FSS, in February 2008. Details can be found on the Ofcom website:</p> <p><a href="https://www.ofcom.org.uk/_data/assets/pdf_file/0/027/73926/Spectrum-bands-and-licence-areas-for-28-GHz..pdf">https://www.ofcom.org.uk/_data/assets/pdf_file/0/027/73926/Spectrum-bands-and-licence-areas-for-28-GHz..pdf</a></p>

30 GHz	Applications	Licence Products	Other Information
 <p>29.5    30.0</p>	<p>This band is primarily used by interactive and ubiquitous uncoordinated terminals.</p>	<p>Satellite (Permanent Earth Station).</p> <p>Satellite (Transportable Earth Station).</p> <p>Satellite (Earth Station Network).</p>	<p>Note: In addition to the licence products listed in the previous column, satellite earth stations meeting Interface Requirement 2066 are exempted from licensing (see Statutory Instrument 2010 No.2512).</p>

## Receive Allocations

1.7 GHz	Applications	Licence Products	Other Information
	Meteorological-Satellite applications.	Grant of RSA for ROES.	Requires coordination with terrestrial fixed links.
4 GHz	Applications	Licence Products	Other Information
	Mainly used for intercontinental television contribution (mainly digital); telephony and digital business links; MATV.	Satellite (Permanent Earth Station).  Grant of RSA for ROES.	Requires coordination with terrestrial fixed links and broadband wireless access.
7.8 GHz	Applications	Licence Products	Other Information
	Meteorological-Satellite applications.	Grant of RSA for ROES.	Requires coordination with terrestrial fixed links.

11 GHz	Applications	Licence Products	Other Information
	<p>10.7 - 12.5 GHz mainly used for Direct to home television, ISP backhaul and Television distribution.</p> <p>12.5 - 12.75 GHz used for the above and VSATs.</p>	<p>Satellite (Permanent Earth Station).</p>	<p>Requires coordination with terrestrial fixed links in the band 10.7 - 11.7 GHz.</p> <p>11.7 - 12.5 GHz for BSS.</p>

18 GHz	Applications	Licence Products	Other Information
	<p>19.7 - 20.2 GHz is normally paired with 29.5 - 30 GHz, mainly intended for use by interactive and ubiquitous uncoordinated terminals.</p>	<p>Satellite (Permanent Earth Station).</p>	<p>Requires coordination with terrestrial fixed links in the band 17.7 - 19.7 GHz.</p>

### Further information:

Email: [spectrum.licensing@ofcom.org.uk](mailto:spectrum.licensing@ofcom.org.uk)  
Website: [www.ofcom.org.uk](http://www.ofcom.org.uk)

### Notes:

1. Ofcom will only accept a licence application for a Satellite (Permanent Earth Station) if the total receive bandwidth is less than or equal to the total transmit bandwidth.

### Glossary

BSS	broadcast-satellite service
E→s	earth-to-space
FSS	fixed-satellite service
HDFSS	high-density applications in the fixed-satellite service
ISP	internet service provider
MATV	master antenna television
MSS	mobile-satellite service
NGSO	non-geostationary satellite orbit
ROES	receive only earth station
RR	Radio Regulations
RSA	recognised spectrum access
s→E	space-to-earth
VSAT	very small aperture terminal