## Web-page contents (<u>https://www.itu.int/ITU-R/go/space-epfd/en</u>)

Appendix 4 element	Description	Required under limited set	Required under extended set	Note
A.4.b.6.a	For each range of latitudes:			
A.4.b.6.a.1	the maximum number of non-geostationary satellites transmitting with overlapping frequencies to a given location	X		
A.4.b.6.a.2	the associated start of the latitude range	Х		
A.4.b.6.a.3	the associated end of the latitude range	Х		
A.4.b.7.a	the maximum number of non-geostationary satellites receiving simultaneously with overlapping frequencies from the associated earth stations within a given cell	X		
A.4.b.7.b	the average number of associated earth stations with overlapping frequencies per square kilometre within a cell	X		
A.4.b.7.c	the average distance, in kilometres, between co frequency cells	X		
A.4.b.7.cbis	the minimum elevation angle at which any associated earth station can transmit to or receive from a non- geostationary satellite	X		
A.4.b.7.d	For the exclusion zone about the geostationary- satellite orbit:	X		
A.4.b.7.d.1	the type of zone (based on topocentric angle or, satellite-based angle or other method for establishing the exclusion zone)	X		
A.4.b.7.d.2	if the zone is based on a topocentric angle or a satellite-based angle, the width of the zone, in degrees	Х		
A.14	SPECTRUM MASKS in xml-format			NOTE 1
A.14.a	For each e.i.r.p. mask used by the non-geostationary space station:	X	X	
A.14.a.1	the mask identification code	Х	Х	
A.14.a.2	the lowest frequency for which the mask is valid	Х	Х	
A.14.a.3	the highest frequency for which the mask is valid	Х	Х	
A.14.a.4	the mask pattern defined in terms of the power in the reference bandwidth for a series of angles measured at the non-geostationary space station between the line to the sub-satellite point and the line to a point on the geostationary arc, together with the bandwidth used	X	×	
A.14.a.5	the reference bandwidth used for the mask pattern of A.14.a.4	X	X	
A.14.b	For each associated earth station e.i.r.p. mask:	X	X	

## Specific data elements required under limited and extended sets of data

A 14 b 1	the mask identification code	v	v	
A 14 b 2	the lowest frequency for which the mack is valid	∧ v		
A.14.0.2	the highest frequency for which the mask is valid		× ×	
A.14.0.5	the mask nettern defined in terms of the neuror in the	X	^ V	
A.14.0.0	the mask pattern defined in terms of the power in the	~	~	
	off avia angle between the new prostationers south			
	off-axis angle between the non-geostationary earth			
	station boresignt line and the line from the non-			
	geostationary earth station to a point on the GSU arc			
A.14.b.7	the reference bandwidth used for the mask pattern of	X	Х	
	A.14.0.6			
A.14.c	For each pfd mask used by the non-geostationary	X	Х	
	space station:			
A.14.c.1	the mask identification code	X	X	
A.14.c.2	the lowest frequency for which the mask is valid	X	Х	
A.14.c.3	the highest frequency for which the mask is valid	X	Х	
A.14.c.4	the type of mask, among one of the following types:	Х	Х	
	(Earth-based exclusion zone angle, difference in			
	longitude, latitude), (satellite-based exclusion zone			
	angle, difference in longitude, latitude) or (satellite			
	azimuth, satellite elevation, latitude)			
A.14.c.5	the mask pattern of the power flux-density defined in	х	Х	
	three dimensions			
A.14.c.6	the reference bandwidth used for the mask pattern of	Х	Х	
	A.14.c.5			
A.14.d	For each set of non-geostationary-satellite system		Х	NOTE 2
	operating parameters			
A.14.d.1	the parameter set identification code		Х	
A.14.d.2	the lowest frequency for which the mask is valid			
A.14.d.3	the highest frequency for which the mask is valid		Х	
A.14.d.4	minimum limit of the latitude range of non-		Х	
	geostationary earth station locations in degrees North			
A.14.d.5	maximum limit of the latitude range of non-			
			Х	
	geostationary earth station locations in degrees North		X	
A.14.d.6	geostationary earth station locations in degrees North the average number of associated earth stations, per		x	
A.14.d.6	geostationary earth station locations in degrees North the average number of associated earth stations, per km2, active at the same time		X X	
A.14.d.6 A.14.d.7	geostationary earth station locations in degrees North the average number of associated earth stations, per km2, active at the same time the average distance, in kilometres, between co		x x x	
A.14.d.6 A.14.d.7	geostationary earth station locations in degrees North the average number of associated earth stations, per km2, active at the same time the average distance, in kilometres, between co frequency cell or beam footprint centre		x x x	
A.14.d.6 A.14.d.7 A.14.d.8	<ul> <li>geostationary earth station locations in degrees North</li> <li>the average number of associated earth stations, per</li> <li>km2, active at the same time</li> <li>the average distance, in kilometres, between co</li> <li>frequency cell or beam footprint centre</li> <li>the minimum duration, in seconds, during which an</li> </ul>		x x x x	
A.14.d.6 A.14.d.7 A.14.d.8	<ul> <li>geostationary earth station locations in degrees North</li> <li>the average number of associated earth stations, per</li> <li>km2, active at the same time</li> <li>the average distance, in kilometres, between co</li> <li>frequency cell or beam footprint centre</li> <li>the minimum duration, in seconds, during which an</li> <li>earth station will track a non-geostationary satellite</li> </ul>		x x x x	
A.14.d.6 A.14.d.7 A.14.d.8	<ul> <li>geostationary earth station locations in degrees North</li> <li>the average number of associated earth stations, per</li> <li>km2, active at the same time</li> <li>the average distance, in kilometres, between co</li> <li>frequency cell or beam footprint centre</li> <li>the minimum duration, in seconds, during which an</li> <li>earth station will track a non-geostationary satellite</li> <li>without handover for different ranges of latitude</li> </ul>		x x x x	
A.14.d.6 A.14.d.7 A.14.d.8 A.14.d.9	<ul> <li>geostationary earth station locations in degrees North</li> <li>the average number of associated earth stations, per km2, active at the same time</li> <li>the average distance, in kilometres, between co frequency cell or beam footprint centre</li> <li>the minimum duration, in seconds, during which an earth station will track a non-geostationary satellite without handover for different ranges of latitude</li> <li>the maximum number of co-frequency tracked non-</li> </ul>		X X X X X	
A.14.d.6 A.14.d.7 A.14.d.8 A.14.d.9	<ul> <li>geostationary earth station locations in degrees North</li> <li>the average number of associated earth stations, per km2, active at the same time</li> <li>the average distance, in kilometres, between co frequency cell or beam footprint centre</li> <li>the minimum duration, in seconds, during which an earth station will track a non-geostationary satellite without handover for different ranges of latitude</li> <li>the maximum number of co-frequency tracked non- geostationary satellites for different ranges of latitude</li> </ul>		X X X X X	
A.14.d.6 A.14.d.7 A.14.d.8 A.14.d.9 A.14.d.10	<ul> <li>geostationary earth station locations in degrees North</li> <li>the average number of associated earth stations, per km2, active at the same time</li> <li>the average distance, in kilometres, between co frequency cell or beam footprint centre</li> <li>the minimum duration, in seconds, during which an earth station will track a non-geostationary satellite without handover for different ranges of latitude</li> <li>the maximum number of co-frequency tracked non-geostationary satellites for different ranges of latitude</li> <li>the exclusion zone angle (degrees), i.e. the minimum</li> </ul>		x x x x x x x	
A.14.d.6 A.14.d.7 A.14.d.8 A.14.d.9 A.14.d.10	<ul> <li>geostationary earth station locations in degrees North</li> <li>the average number of associated earth stations, per km2, active at the same time</li> <li>the average distance, in kilometres, between co frequency cell or beam footprint centre</li> <li>the minimum duration, in seconds, during which an earth station will track a non-geostationary satellite without handover for different ranges of latitude</li> <li>the maximum number of co-frequency tracked non- geostationary satellites for different ranges of latitude</li> <li>the exclusion zone angle (degrees), i.e. the minimum angle to the geostationary arc at the non-</li> </ul>		X X X X X X	
A.14.d.6 A.14.d.7 A.14.d.8 A.14.d.9 A.14.d.10	<ul> <li>geostationary earth station locations in degrees North</li> <li>the average number of associated earth stations, per km2, active at the same time</li> <li>the average distance, in kilometres, between co frequency cell or beam footprint centre</li> <li>the minimum duration, in seconds, during which an earth station will track a non-geostationary satellite without handover for different ranges of latitude</li> <li>the maximum number of co-frequency tracked non- geostationary satellites for different ranges of latitude</li> <li>the exclusion zone angle (degrees), i.e. the minimum angle to the geostationary arc at the non- geostationary earth station at which it will operate</li> </ul>		X X X X X X	
A.14.d.6 A.14.d.7 A.14.d.8 A.14.d.9 A.14.d.10	<ul> <li>geostationary earth station locations in degrees North</li> <li>the average number of associated earth stations, per km2, active at the same time</li> <li>the average distance, in kilometres, between co frequency cell or beam footprint centre</li> <li>the minimum duration, in seconds, during which an earth station will track a non-geostationary satellite without handover for different ranges of latitude</li> <li>the maximum number of co-frequency tracked non-geostationary satellites for different ranges of latitude</li> <li>the exclusion zone angle (degrees), i.e. the minimum angle to the geostationary arc at the non-geostationary earth station at which it will operate, defined at the earth station's given latitude range</li> </ul>		x x x x x x x	

A.14.d.11	the minimum elevation angle (degrees) of the non-	Х	
	geostationary earth station when it is receiving or		
	transmitting within a given latitude (degrees North)		
	and azimuth (degrees from North) range		

**Note 1** – For XML-format description, see <u>https://www.itu.int/ITU-R/go/space-mask-XMLfile/en</u>

**Note 2** – For masks with operating parameters see section B3.3 of ITU-R Recommendation S.1503-3.