

QUESTION ITU-R 270-1/4^{1, 2}

Fixed-satellite service systems using very wideband spreading signals

(2003-2005)

The ITU Radiocommunication Assembly,

considering

- a) that new transmission techniques using very wide spectrum may be used in fixed-satellite service (FSS) uplinks and/or downlinks;
- b) that the above transmission techniques include impulse-radio which is characterized by repetition of very short pulse transmissions;
- c) that the signals of the FSS systems using short pulse transmission mentioned in *considering* b) may be spread to very large bandwidth within the FSS allocations;
- d) that although some FSS systems using wideband spreading signals emit very low average power, some systems may emit relatively high peak power levels;
- e) that the applications of the FSS systems using wideband spreading signals have different features from the other FSS systems;
- f) that the characteristics of the FSS systems using wideband spreading signals are different from currently deployed FSS systems;
- g) that the space segments of the FSS systems using wideband spreading signals radiate signal to a very wide area;
- h) that the interference effect of the emissions from an FSS system using wideband spreading signals needs to be defined;
- j) that the FSS systems using wideband spreading signals may address new applications and new uses;
- k) that the scope of this Question in studying transmission techniques using very wide spreading signals should be limited to those signals of FSS systems within the bandwidths of FSS allocations,

¹ This Question should be brought to the attention of Radiocommunication Study Groups 1, 7, 8 and 9 for information.

² This is different from the application in Question ITU-R 269/4.

noting

a) that ITU-R Task Group 1/8 is currently studying characteristics, compatibility, measuring techniques and spectrum management issues for ultra-wideband emissions, which should not be confused with this Question,

decides that the following Question should be studied

- 1 What are the appropriate characteristics of FSS systems using wideband spreading signals, that are within the bandwidths of FSS allocations?
- 2 What requirements are necessary to ensure that satellite devices radiating wideband spreading signals will not cause harmful interference to other FSS systems?

further decides

- 1 that in order to perform the necessary studies, key technical data and characteristics of satellite systems using wideband spreading signals should be defined and documented;
- 2 that the results of the studies outlined above should be included in one or more Recommendations;
- 3 that the studies should be completed by 2007.

Category: S3