RESOLUTION ITU-R 40-2*

Worldwide databases of terrain height and surface features

(1997-2003-2007)

The ITU Radiocommunication Assembly,

considering

a) that there is a requirement for planning purposes for improved worldwide methods of predicting field strength which take account of terrain height and surface features (including ground cover such as buildings, vegetation, etc.);

b) that digital maps of terrain height are now becoming widely available with various data formats and resolutions, and that maps with 3 arc second resolution in latitude and longitude are available on a global basis. Digital maps with better resolution are becoming available nationally;

c) that propagation predictions may be improved by the inclusion of more detailed information on terrain heights and surface features;

d) that the availability of digital maps of terrain height and surface features would be of considerable benefit to developing countries in the planning of their existing and newly introduced services;

e) that the use of terrain height data may optimize technical studies;

f) that Radiocommunication Study Group 3 has an active work programme concerning the development of improved prediction methods,

resolves

1 that a terrain database with a 1 arc second horizontal resolution in latitude and longitude is more suitable for worldwide methods of propagation prediction in the frequency range from 30 MHz to 60 GHz;

2 that administrations should review the terrain data available in this format, and should provide additional data so as to complete the worldwide extent of the database;

3 that administrations should be encouraged to make these terrain databases freely available for ITU purposes;

4 that administrations should encourage organizations involved in the production of terrain maps to produce databases of terrain height and surface features with a resolution equal to, or better than, 1 arc second for areas for which such data do not exist;

5 that administrations are encouraged to use terrain height for radio propagation prediction;

6 that terrain heights should be used according to ITU-R Recommendations.

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* This Resolution should be brought to the attention of Radiocommunication Study Group 1 for consideration of the use of a terrain database for national spectrum management purposes.

This Resolution should also be brought to the attention of the Telecommunication Development Sector.