MALTA COMMUNICATIONS AUTHORITY

Thirty-Fourth Schedule to Decision No. MCA/D-22-4662

Apparatus General Authorisation for Land Based Earth Stations In-Motion (ESIM) Operating with Geostationary Satellite Systems in the Frequency Bands 10.7-12.75 GHz and 14.0-14.5 GHz

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Revision History of the Thirty-Fourth Schedule

Land based earth stations in-motion (ESIM) operating with geostationary satellite systems in the frequency bands 10.7-12.75 GHz and 14.0-14.5 GHz

Date	Comments
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This Schedule shall be read and construed as one with Part I and Part II of Decision No. MCA/D/22-4662

Adopted pursuant to Article 30A of the Electronic Communications (Regulation) Act (Cap. 399) establishing the radiocommunications apparatus general authorisation

Article 1 – Applicability

This apparatus general authorisation applies to any person installing or using a land based earth station in-motion operating with geostationary satellite systems in the frequency bands 10.7-12.75 GHz and 14.0-14.5 GHz or any apparatus intended to be used as a component part of that apparatus.

Article 2 – Interpretation

In this Schedule unless the context otherwise requires:

(1) “earth station in-motion” or “ESIM” means an earth station that is used while in motion or at temporary halts;

(2) "earth stations" shall have the same meaning as in the Radio Regulations;

(3) “land based ESIM” means an ESIM that is used for land applications such as a vehicle-mounted earth station; and

(4) "network control facility" or "NCF" refers to a set of functional entities that, at system level, monitor and control the correct operation of the ESOMP and, if appropriate, all of the ESOMPs in a network.

Article 3 – Minimum technical parameters

(1) Unless otherwise specified in the National Frequency Plan, a land based ESIM shall operate with geostationary satellites as part of the fixed-satellite service within the 10.70-12.75 GHz (space-to-Earth) and 14.00-14.50 GHz (Earth-to-space) frequency bands.

(2) A land based ESIM shall operate under the control of a network control facility.

(3) The minimum technical parameters of a land based ESIM shall be those specified in the Annex to this Schedule.

Annex to the Thirty-Fourth Schedule
Minimum Technical Parameters for Land Based ESIM Operating with Geostationary Satellite Systems in the Frequency Ranges 10.7-12.75 GHz and 14.0-14.5 GHz

Land based ESIM operating with geostationary satellite systems in the frequency bands 10.7-12.75 GHz and 14.0-14.5 GHz shall comply with the following technical and operational requirements:

1. The design, coordination and operation of the land based ESIM shall take into account the following factors:

    a) antenna mis-pointing;

    b) variations in the antenna pattern; and

    c) variations in the transmit e.i.r.p.

2. Land based ESIM that use closed-loop tracking of the satellite signal shall employ an algorithm that is resistant to capturing and tracking adjacent satellite signals. The earth stations shall immediately cease transmissions when they detect that unintended satellite tracking has happened or is about to happen.

3. Techniques to access spectrum and mitigate interference that provide an appropriate level of performance to comply with the essential requirements of Directive 2014/53/EU of the European Parliament and of the Council shall be used. If relevant techniques are described in harmonised standards or parts thereof the references of which have been published in the *Official Journal* of the European Union in accordance with Directive 2014/53/EU, performance at least equivalent to the performance level associated with those techniques shall be ensured.

4. The total e.i.r.p. of land based ESIM shall not exceed 54.5 dBW.