

## GSMA Comments - Draft RSPG Opinion on the EU-level policy approach to satellite Direct-to-Device connectivity and related Single Market issues

March 2025

### Introduction

Direct connectivity from a satellite to an unmodified mobile handset or IMT device may be a useful tool for expanding coverage or improving resilience and may offer benefits to European consumers, governments, and companies. It is however a nascent technology, and regulatory best-practice is in its infancy.

D2D connectivity may support coverage extension for mobile operators in remote areas currently not covered by terrestrial networks, making it possible to use emergency messaging services, voice calls or basic data services, although white spots in Europe are usually small compared to satellite spot beams.

Any approach to D2D introduction should enable the technology safely and with surety on coexistence with mobile terrestrial networks that are currently providing services to hundreds of millions of users in Europe. The GSMA is active in developing best-practice guidelines for regulation on D2D, while some examples of government regulation also exist.

### Existing regulations

Only a small number of countries have existing regulations on D2D and in all cases these are recently developed. Ascertaining 'best practice' is thus premature but there are some useful elements in the early examples. The US FCC's [Supplemental Coverage from Space \(SCS\) regulation](#) stipulates the following:

- *"SCS will be authorized pursuant to a secondary MSS allocation in the U.S. Table. These operations may not cause harmful interference to—and shall not claim protection from—any station operating in accordance with ITU provisions, whether in the United States or internationally."*
- *"We authorize SCS only where one or more terrestrial licensees ... lease access to their spectrum rights to a participating satellite operator."*

Meanwhile ACMA Australia's regulation on [Satellite direct-to-mobile](#) similarly focuses on the need to protect existing services by operating spectrum through existing terrestrial licence holders.

- *"Our view is that operation of an IMT satellite direct-to-mobile service in Australia is only practical where there is an Australia-wide spectrum licence."*
- *"When a space station transmits to a radiocommunications receiver in a mobile phone, reception by the phone continues to be authorised by the spectrum licence"*
- *"A mobile phone used in an IMT satellite direct-to-mobile service can be operated within the geographic area of the spectrum licence, provided it operates in accordance with the conditions of the licence."*

MNOs should be able to choose whether they form a partnership with satellite players. The interference issue is a significant concern and can only be helped if mobile operators are able to guarantee coexistence and full control of the spectrum to which they have been licensed. This has given rise to an informal terming of the '4 Cs' approach to D2D, stipulating:

- Control of the spectrum by the licensee
- Coordination by the licensee
- Contract with the licensee
- Coexistence with the licensee



## Pre-emption of WRC-27

Some countries have moved forward with D2D regulation, but many are awaiting the results of WRC-27. The GSMA believes that pre-empting WRC-27 may be possible, but it is not without risks for Europe, a continent made up of several countries within a limited geographical area. While the GSMA supports CEPT studies to enhance the international picture on coexistence between D2D and other services, turning such studies into legislation ahead of WRC-27 should be done using conservative assumptions, to ensure protection of terrestrial services and prevent future disruption - any change to the parameters of coexistence to make them more stringent after WRC-27 may be costly to the market and thus to consumers and enterprises using the service.

## Specific regulations for D2D

The GSMA has convened the SNO and MNO sectors for the past year under the umbrella of its D2D Spectrum Task Force, a group made up of some 150 individuals from 50 companies.

Briefly, its output suggests the following guidelines:

### D2D using mobile spectrum / D2D IMT

1. Regulators should allow D2D IMT services to be provided under existing MNO licences on a secondary basis (satellite services must protect IMT networks in accordance with the Radio Regulations).
2. SNO must obtain agreement from MNO to use their licensed spectrum in the licensed area.
3. Interference issues to mobile terrestrial networks that should be addressed in interim frameworks (ahead of WRC-27) include adjacent band and adjacent area.
4. Decisions by WRC-27 may lead to a review of any local regulation decided beforehand. New MSS allocations in IMT bands should be secondary and must protect IMT identification (in accordance with the Radio Regulations).

As such, we repeat our concerns above about pre-empting the outcome of WRC-27 and suggest that any use of CEPT harmonisation measures are kept highly flexible until global agreements are reached in two years' time.

In addition, we consider it is important to ensure compliance to the common requirements and have clear procedures when identifying non-compliance, and thus we support RSPG considerations and recommendations related to this.

We also believe RSPG's opinion should clearly recommend D2D-IMT only being allowed under MNO licences, based on agreement with the MNO holding the licence. While such agreements would remain a national issue, we also welcome coordination between Member States on how NRAs implement such local policy to facilitate sharing.

### D2D using satellite spectrum / D2D MES

1. MNO-SNO partnerships may not always be required due to their separate spectrum licences, but partnerships may be beneficial.
2. WRC-27 will assess bands for MSS under AI 1.12 and AI 1.14. Possible new MSS allocations must protect IMT identification in the band or adjacent bands (in accordance with the Radio Regulations). Part of the bands studied under AI 1.12 and AI 1.14 overlap with bands that are harmonized and deployed for terrestrial mobile networks in Europe. Those bands are assessed also for D2D-IMT under AI 1.13.

Any new satellite use of spectrum (e.g. in SRD bands) must also not cause interference with mobile.

We consider it is important to ensure compliance to the common requirements and have clear procedures when identifying non-compliance, and thus we support RSPG considerations and recommendations related to this.

The GSMA thus supports the RSPG's proposal to seek better clarity on licensing regimes as well as to ensure proper receiver blocking characteristics in MES terminals operating in the L-band in order to reduce constraints on mobile SDL operating in the ECS harmonised band.





## Level playing field

As satellite and mobile services evolve, other issues also emerge beyond coexistence. Where the same service is being offered by MNOs and SNOs, both technologies should be subject to the same rules.

RSPG has identified D2D-IMT service provision issues such as risk for unintentional roaming, emergency calling and numbering issues, or competition issues between providers. We did not see clear recommendations related to these, and consider they need to be considered further when developing the EU framework for D2D in IMT bands, beyond spectrum policy considerations.

EU policy should foster competitive provision of satellite D2D for the benefit of all. Thus, it is important to require all satellite providers comply with EU legislation and monitor the competition in the provision of satellite services.

## Emergency Services

Access to emergency services using a satellite connectivity should follow the same principle that applies for terrestrial services: access to the service should be granted to any customer with a compatible handset, irrespective of the mobile operators they subscribe to.

