

Germany, Item 12**UNCOPUOS
64th Session, Vienna, 25 August – 3 September 2021****Agenda Item 12: Use of space technology in the United Nations system****Statement by Germany**

Mr. Chair, distinguished delegates,

the World Radio Conference in 2019 passed a resolution to study whether frequencies in the X-band that are currently allocated to radar Earth observation satellites could be shared with international mobile telecommunication systems, or IMT, such as terrestrial 5G networks. The resolution invites Member States of the International Telecommunication Union to prepare so-called “sharing and compatibility studies”. Such studies would assess whether the frequency bands in question could be used by IMT services without causing harmful interference or imposing additional constraints to radar satellite systems.

Radar satellites have a number of beneficial applications. They can provide high-resolution images of the Earth regardless of weather conditions, cloud covers or illumination of the surface by the Sun. This makes them a reliable application that can be used for mapping forests, land utilization and agricultural activities, monitoring geologically active areas and much more. For example, the German satellites TerraSAR-X and TanDEM-X frequently contribute images of landslides, volcanic activity and flooding events to the International Charter “Space and Major Disasters”, thereby assisting disaster management efforts. They also produced a global digital elevation model of the Earth which has been made freely available for scientific use. These and other radar satellites therefore provide a great value to science and society, not just in Germany but also in many other countries.

In order for such systems to continue operating in the future, it is important to ensure that no harmful interference will be caused by the introduction of IMT systems in the same frequency bands. The German Space Agency, together with German industry, is studying the potential impact of the allocation of frequencies in the X-band to IMT systems on currently operational as well as future generation SAR systems to inform the discussions at the upcoming World Radio Conference in 2023. Since this is an issue that affects the broader space community, we encourage Member States of this

Committee who also see the beneficial applications of SAR satellites to conduct their own sharing and compatibility studies so that a decision at the next World Radio Conference can be taken on a data basis that is as broad as possible. We will describe this issue in more detail in a technical presentation during this session and are happy to discuss it further with interested delegations.

Thank you for your kind attention.