



Our ref.:

Our date:

Your ref.:

Your date:

Contact:

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## Spectrum licence number xxxxxxx – 10 GHz band

Under Section 6-2 of Act no. 83 of 4 July 2003 on Electronic Communications, the Norwegian Post and Telecommunications Authority (NPT) hereby grants xxxxxxx, a licence to use the frequencies 10290-10320 and 10640-10670 MHz.

The licence covers terrestrial services on Norwegian land territory with the exception of Svalbard, Jan Mayen Island, Antarctic and Norwegian dependencies. The licence is valid until 31 December 2020 and shall expire without further notice.

The licensee is responsible for ensuring that the use of the frequencies does not significantly reduce the quality of, interfere with or repeatedly interrupt a radio service which is operated in accordance with laws, regulations and licences granted by the NPT.

### Background

A spectrum licence is a right of use which is described first and foremost through the specification of the bandwidth, spectral position, geographic coverage and the duration of the licence. The spectrum is assigned as a spectrum licence without usage restrictions apart from the defined spectral mask and co-channel (geographical) boundaries. The licensees will manage the use of frequencies themselves within the framework provided for in laws, regulations and terms and conditions of the licences.

The block edge represents a coordination threshold and a point of departure for negotiations and trading. Thus, adjacent frequency users may agree to deviate from the defined mask. This means that the NPT will not enforce the block-edge requirements for neighbouring operators who apply mutual co-ordination at the block edge in view of optimising the guard bands internal to the blocks.

The spectral mask is set to establish clear boundaries between adjacent licences. There shall only be a minor likelihood of interference in connection with usage within the boundaries, but coordination between neighbouring users might be necessary. It cannot be ruled out that interference may occur, in particular when different kinds of radio equipment are located at the same point. In such cases, the rule of first-in-time applies.

Anyone who wants to use the frequencies in a way that requires a higher level of protection against interference from other frequency users than that provided for by the boundaries between the

licences, must make own arrangements for such protection through coordination / agreements on usage restrictions. If licences have not been assigned for adjacent frequency bands, any frequency usage outside the boundaries of the licence will require a licence from the NPT.

### **Technical description of the boundaries of the licence**

The technical conditions for the frequency use in this band is outlined in the standards ETSI EN 302 217 (point-to-point) and ETSI EN 302 326 (point-to-multipoint). Spectrum mask must be in accordance with ETSI EN 302 217. The World Radio Conference in 2007 (WRC-07) decided to impose some restrictions for point-to-point and point-to-multipoint systems in the frequency band 10600-10680 MHz. The resolution was made in order to protect earth exploration-satellite services (EESS). In accordance to our international obligations this new resolution will be implemented in Norway. The resolution is further described in the attachment.

On the border between Norway and a neighbouring state, on the base line, or on the border between geographical regions, the power density shall not exceed  $-122.5 \text{ dBW/m}^2$  measured with a reference bandwidth of 1 MHz, unless a coordination agreement that departs from this has been reached. Frequency use that results in a higher power density on the border with a neighbouring state must be coordinated by the NPT. For frequency use that requires coordination with a neighbouring state, the frequencies may not be used until the NPT has confirmed that the coordination has been carried out with a positive result. Coordination of frequency use between different regions in Norway is to be undertaken by the holders of the frequency licenses.

### **Trading**

The spectrum licence may be traded wholly or in part. There are no general restrictions on the types of trade (sale, leasing, and co-ordination). When the transfer of rights and obligations normally referred to as a "sale" is planned, the transfer must be approved by and registered with the NPT in order for the seller to be relieved of, and the buyer to assume, the rights and obligations that follow from the licence.

### **Duty of disclosure**

If requested the licensee is obliged to inform NPT within two months about the location of stations, technical information regarding equipment etc.

### **Changes to the terms and conditions**

Terms and conditions relating to frequency use and technologies can be amended, including to the detriment of the licensee, if the amendment is a necessary consequence of Norway's obligations under International Law. In addition, the terms and conditions can be amended if the amendment is a necessary consequence of collaboration on international harmonisation in which the NPT is a participant.

### **Administrative charges payable to the NPT**

The licensee shall pay administrative charges to the NPT, cf. Section 12-1 of the Electronic Communications Act and Regulation 21 February 2005 on Administrative Charges Payable to Norwegian Post and Telecommunications Authority. Invoice for administrative charges will be sent separately.

## **Appeals**

This decision can be appealed, cf. Chapter VI of the Act of 10 February 1967 relating to procedure in cases concerning public administration (the Public Administration Act). The deadline for appeals is 3 weeks from the time when the licensee is notified of the decision.