

05 March 2018

**ESOA AND GVF COMMENTS ON  
Norwegian Auction of Frequency Resources - Consultation of General Rules and the overall regulation of  
the allocation of frequency resources in the bands: high 6 GHz, 8 GHz, low 10 GHz, high 10 GHz, 13 GHz,  
18 GHz, 23 GHz, 28 GHz and 38 GHz**

## Introduction

The EMEA Satellite Operators Association (“ESOA”) and the Global VSAT Forum (“GVF”) are pleased to submit their views and comments to the Norwegian National Communications Authority (“Nkom”) on the Norwegian Auction Consultation and the general Rules and the overall regulation of the allocation of frequency resources in the bands: high 6 GHz, 8 GHz, low 10 GHz, high 10 GHz, 13 GHz, 18 GHz, 23 GHz, 28 GHz and 38 GHz.<sup>1</sup> Norway has a large and vibrant telecommunications market, which most members of ESOA and GVF serve successfully.

Nkom’s decision to release these bands by auction soon after the March 2017 award for the bands low 6 GHz, high 6 GHz, 8 GHz, 10 GHz, 13 GHz, 18 GHz, 23 GHz, 28 GHz and 38 GHz

## About ESOA and GVF

ESOA is the world’s only CEO-driven satellite association, and leads a coordinated and impactful response to the global challenges and opportunities the commercial satellite communications sector faces. Established as a non-profit organisation, ESOA has as its objective to serve and promote the common interests of satellite operators. Today ESOA represents the interests of EMEA satellite operators who deliver information communication services across the globe.<sup>2</sup>

The GVF brings together organizations engaged in the delivery of advanced broadband and narrowband satellite services to consumers, and commercial and government enterprises worldwide. The GVF is an independent, non-partisan and non-profit organisation with members from every major region of the world. The broad-based membership represents every sector of the satellite industry, including fixed and mobile satellite operators, satellite network operators, teleports, satellite earth station manufacturers, system integrators, value added and enhanced service providers, telecommunications carriers, consultants, law firms, and users.<sup>3</sup>

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<sup>1</sup> A published 20.02.2018 on: <https://www.nkom.no/aktuelt/nyheter/auksjon-av-frekvensressurser-h%C3%B8ring-av-overordnede-regler>

<sup>2</sup> A complete list of ESOA Members can be found at [www.esoa.net](http://www.esoa.net).

<sup>3</sup> A complete list of GVF Members can be found at [www.gvf.org](http://www.gvf.org).

## Key Issues for Consideration by the Nkom

ESOA and the GVF thank Nklom for the opportunity to provide comments on the General Rules for the auction, and note that some of our respective members look forward to the publication of the hearing statements shortly after the close of this consultation and the detailed rules for the auction in July-August 2018.

### 1. ESOA and GVF do not agree with the principle of auctioning spectrum licences when bands are shared with satellite services

Many of the bands, or parts thereof, identified by Nkom for release are shared with satellite services. ESOA and the GVF believe auction rules should not encourage bidders to believe that the shared bands, or parts thereof, can be used for ubiquitous terrestrial mobile services. ESOA is concerned that administrations use auctioned spectrum licences as a rationale to encouraged Europe-wide harmonisation measures for mobile services that are not compatible with satellite services. ESOA and the GVF would therefore wish to see Nkom adopt:

- regulations that ensure that satellite earth stations located in Norway are protected where the bands are used for downlinking satellite services on Norwegian territory. This should take the form of protection zones within which the operation of terrestrial services should be excluded.
- rules for the award to protect the satellite earth stations of neighbouring administrations where access to spectrum for satellite services is protected by UN treaty
- technical and regulatory constraints for terrestrial services to protect the rights of other administrations to continue to use the bands for satellite services where these are shared and used for satellite uplinks

### 2. Inhomogeneous nature of spectrum - rationale for further award (Section 2, 2.1)

ESOA and the GVF note that Nkcom has decided that the 10 GHz frequency band will be included in the forthcoming competition-based auction, though no competing applications were received within the earlier application deadline.

In general, a surplus demand for spectrum during an auction for one band of frequencies does not indicate demand for other frequencies that are not included in that auction band. This is because the design of spectrum licences that are to be auctioned encourages demand for those specific frequencies.

The physical properties and externalities of spectrum bands differ and the value of bands is generally uncorrelated.

### 3. Release of bands allocated to satellite services

ESOA and the GVF believe that long term viable and sustainable spectrum access for GEO and Non-GEO High Throughput / Very High Throughput satellite systems and services is required to the bands internationally allocated for that purpose, taking into account the huge investments already made into Ka-band GEO and Non-GEO satellite systems and associated services being delivered and planned to be delivered by European satellite companies.

Satellite systems will need to continue to access and use the various existing ITU allocated satellite/space service services allocations including the bands identified by Nkom at 17,706.9-18,277.5 GHz/18,716.9-19,287.5 GHz ("18 GHz") and 28,332.5-28,444.5 GHz/29,340.5-29,451.5 GHz ("28 GHz"). Therefore, whether by auction or any other award mechanism, ESOA and the GVF strongly oppose Nkom's proposed release of the spectrum bands, or parts thereof, that are allocated to satellite services.

ESOA and the GVF strongly urge Nkom to ensure that the 18 GHz and 28 GHz frequency ranges are taken out of the scope of the award to ensure that FSS services can continue to operate there.