

# STARLINK

April 29, 2024  
The National Communications Authority (Nkom)  
Nygård 1, 4790 Lillesand

*RE: Consultation on the 26 GHz assignment plan*

Starlink Norway AS (SpaceX) appreciates the opportunity to provide brief comments in response to the National Communications Authority (Nkom)'s consultation on the 26 GHz band.

SpaceX is a private company founded in 2002 to revolutionize space technologies, with the ultimate goal of enabling humanity to become a multi-planetary species. SpaceX has achieved a series of historic milestones and is proud to have become the first private company in history to send astronauts to orbit, safely returning them to Earth. To date, SpaceX has successfully launched more than 330 missions to space.

SpaceX is leveraging its accumulated expertise in space system manufacturing, design, and operations, to create Starlink, a constellation of satellites designed to provide high-speed, low-latency broadband service across Norway and anywhere around the globe. To date, SpaceX has launched over 6,000 non-geostationary orbit ("NGSO") Starlink satellites and deployed extensive ground infrastructure employing advanced communications and space operations technology. The Starlink system has been designed to make efficient use of radio spectrum resources by optimizing its ability to flexibly share spectrum with other licensed satellite and terrestrial users, including by using advanced beam-forming and digital processing technologies. SpaceX currently connects to the customer user terminals in the Ku-band for both uplink and downlink frequencies, with gateway links in the Ka and E-bands, but as demand grows, it will be important to look ahead to other bands to meet evolving consumer needs. SpaceX began Starlink operations in Norway in August 2022 and currently operates a gateway ground station in Åfjord. SpaceX hopes to expand this site and is looking into the possibility of building additional infrastructure in the country to provide even better service to Norwegian customers.

As Nkom contemplates a framework for the 26 GHz band following the recent Electronic Communications Committee (ECC) report on harmonized conditions for 5G technology in 24.25-27.5 GHz, SpaceX urges Nkom to consider the effect mobile services can have on other services in adjacent bands. Specifically, SpaceX and other Fixed Satellite Service (FSS) operate in the spectrum adjacent (the "28 GHz" band, beginning at 27.5 GHz) and SpaceX encourages Nkom to ensure these critical services are appropriately protected. This could be achieved by contemplating reasonable out-of-band emissions limits to ensure protection of incumbents in adjacent bands, as set forth in ECC Decision (18)06. Nkom should ensure that any new spectrum authorizations for mobile services do not constrain satellite services from taking advantage of the full band for which they are authorized to allow Norwegian citizens to get the maximum benefit from next generation satellite services, particularly in rural and remote locations.

SpaceX applauds Nkom for its on-going work on these two critical spectrum bands and welcomes the opportunity to work closely with Nkom as they develop frameworks for licensing and spectrum sharing.

Sincerely,



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