



Norwegian
Communications
Authority

International Telecommunication Union - ITU
Place des Nations
1211 GENEVA 20
Sveits

Our ref.: 2300325-19 -
Our date: 19.6.2026

Contact: Veronika Djupvik

Modification of the Norwegian N3X satellite network

Dear Madam, Dear Sir,

Please be informed that the Norwegian Communication Authority (Nkom) has submitted an e-filing to the ITU containing the technical information required for the modification of the Norwegian non-geostationary satellite network **N3X** (SNS ID 123545022, API/B/2320).

The N3X satellite network currently consists of three LEO satellites in circular orbit distributed over two orbital planes.

This modification includes the following updates to the network:

- The addition of three (3) satellites, increasing the total number of satellites in the N3X constellation.
- The removal of the XDOWN beam, as it was incorrectly registered and is not in operational use.
- Corrections to earth station information and associated geographical service areas for the SUP and SDOWN beams.

The detailed technical parameters related to this filing are provided in the accompanying submission files, including SpaceCap and GIMS data. Zipped file N3X_API.zip, the SpaceCap parameters are contained in N3X_API.mdb, while all GIMS diagrams are contained in N3X_GIMS.mdb.

Validation

The filing has been checked with respect to pfd hard limits in Article 21 of the Radio Regulations.

All beams of this filing and all groups have been validated and no fatal errors were found.

Polarisation

The polarisation is M (Mixed).

PFD-limits

The downlinks are tested for PFD hard limits according to RR Article 21 Section V No.21.16.

The uplink beam is tested with the requirements in Article 21 Section III No.21.8.

Operating and responsible administration

The operating agency is Kongsberg Defence & Aerospace AS, and the responsible administration is the Norwegian Communication Authority (Nkom).

Fixed beams

This modification removes the XDOW beam, as it was not correctly registered.
All beams are described with respect to frequency band, satellite antenna gain, antenna pattern diagrams, service areas, and associated earth stations.

Table-1-1 Fixed beams of N3X with Service Areas and associated Earth Stations

BEAM NAME	FRQ (MHz) MIN	FRQ (MHz) MAX	EMI/ REC	SAT ANT. GAIN [dBi]	SERVICE AREA	EARTH STATIONS
SUP	2025	2110	R	5	AFS, ATA, AUS, CAN, CHL, CNR, E, GRC, HWA, KOR, LTU, MAU, NOR, NZL, USA	TROMSØ, NALT-01, ATHEN, HARTEBEEST HOEK, AWARUA, HAWAII, J EJU ISLAND, LONG BEACH, INUVIK, MASPALOMASMAURITIUS, MINGENEW, PUERTOLLANO, PUNTA ARENAS, SVALSAT, TROLL, VARDØ
SDOWN	2200	2290	E	5,3	AFS, ATA, AUS, CAN, CHL, CNR, E, GRC, HWA, KOR, LTU, MAU, NOR, NZL, USA	TROMSØ, NALT-01, ATHEN, HARTEBEEST HOEK, AWARUA, HAWAII, J EJU ISLAND, LONG BEACH, INUVIK, MASPALOMASMAURITIUS, MINGENEW, PUERTOLLANO, PUNTA ARENAS, SVALSAT, TROLL, VARDØ



Antenna Pattern diagram Earth station.

Frequency band	Link	Recommended ITU pattern
S-band	Downlink (space → Earth)	ITU-R S.672 (<i>space station pattern</i>)
S-band	Uplink (Earth → space)	ITU-R S.465

Nkom kindly requests the Radiocommunication Bureau to initiate the relevant procedures under Article 9 of the Radio Regulations for this modification.

Should you require any additional information or clarification, please do not hesitate to contact us.

With regards

Veronika Djupvik
Head Engineer

Electronically approved. No signature required