



Broadcasting from 1°West

The leading position in the Nordic region and a hotspot location for broadcasting in Central and Eastern Europe

A photograph of a woman with dark hair in a ponytail, seen from behind, sitting on a green sofa. She is watching a soccer game on a television. The TV screen shows a player in a red jersey kicking a ball. The word "BROADCAST" is overlaid in large white letters across the center of the image, with a white underline. A white arrow points to the left from the start of the underline.

BROADCAST

CAPTURING DIGITAL GROWTH

Prime location

Telenor Satellite prides itself on being at the cutting edge of innovation in European satellite broadcasting. We provide high-quality satellite capacity and broadcast services from the prime orbital location of 1°West, long established as the leading position for the Nordic countries and one of Europe's "hot-spot" locations, with a specific focus on Central and Eastern Europe.

Why satellite works

Satellite offers immediately available spectrum and unrivalled potential for broadcasters to launch portfolios of channels. Its ubiquity of coverage for direct-to-home (DTH) satellite and cable networks and its 100% reach in chosen markets provide quality and scalability with minimal costs – thus creating the perfect solution for TV and radio transmissions.

First class platform for video applications

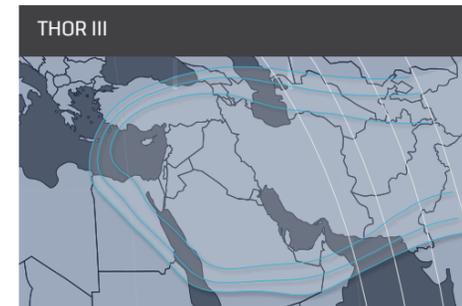
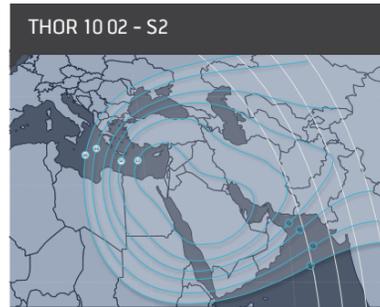
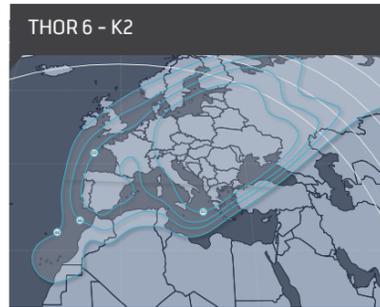
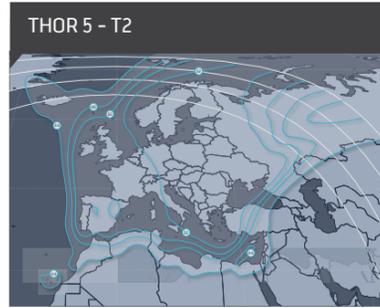
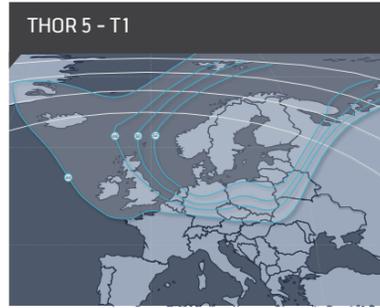
In a fast-changing communications environment, satellite continues to play an important role in the distribution of content. Satellite is a first class platform for delivering new bandwidth-hungry TV applications including HDTV, 3DTV, Mobile TV, pay per view and NVOD.

Over the years, HDTV has seen much success, driven mainly by continued consumer demand. This has resulted in a marked increase of available HDTV channels which are now well established in all regions served by Telenor Satellite. Looking ahead Ultra HD will provide an additional dimension to broadcast's ever-changing landscape, as increased availability provides the technological momentum to gain mass-market appeal.

Our satellite fleet

Our satellite fleet offers attractive coverage for broadcasting and data services throughout the Nordic region, Europe and the Middle East. Telenor Satellite operates from the orbital locations of 1° West and 4° West.

SATELLITE	ORBITAL POSITION	COVERAGE
THOR 5 T1	1° West	Nordic region
THOR 5 T2	1° West	Pan European
THOR 6 K1	1° West	Nordic region
THOR 6 K2	1° West	Central and Eastern Europe
THOR 7 Ku-band	1° West	Central & Eastern Europe
THOR 7 Ka-band (fixed)	1° West	North Sea, Red Sea, Baltic Sea, Persian Gulf & Mediterranean Sea
THOR 7 Ka-band (Steerable)	1° West	Likely position over the North Sea
THOR 10 02 S1	1° West	Europe
THOR 10 02 S2	1° West	Middle East
THOR III	4° West	Middle East (inclined orbit)



OPTIMISED COVERAGE FOR DTH PLATFORMS

Telenor Satellite provides secure, flexible and reliable distribution of direct-to-home (DTH) satellite television, delivering content to audiences throughout Europe.

Our comprehensive portfolio of services covers the entire distribution process – encoding, multiplexing, uplinking, satellite capacity and monitoring during transmission – as well as contribution services via our own video terrestrial media network, called Multi Service Network (MSNW).

The No.1 spot for broadcasters

Our satellites at 1° West already reach close to 18 million TV households, offering one of the fastest-growing platforms for video distribution in Europe.

From our satellite home at 1° West, which transmits more than 700 TV channels and hundreds of radio channels, Telenor Satellite broadcasts more than 265 digital TV channels across the Nordic region and throughout Central and Eastern Europe.

Our expertise and our expansive ground infrastructure – which comprises teleports and a terrestrial media network that spans Europe and interconnects with the USA – offer broadcasters a complete turnkey solution for channel distribution and contribution via satellite and fibre links.

From transmitting content via one of our satellites to providing point-to-point distribution services via our video terrestrial network (MSNW), Telenor Satellite is the provider of choice for broadcasting services.

Established position at 1° West

Telenor Satellite is uniquely placed to serve the broadcasting needs of our customers thanks to the combination of our extensive ground-based systems – operated from our main teleport in Norway and our UK teleport – and our high-powered satellite coverage across Europe from 1° West. We combine the broad reach of our satellite capacity with end-to-end broadcast services, adapting our solutions to address your chosen markets.



OCCASIONAL SOLUTIONS FOR ALL BROADCASTING EVENTS

From pre-planned to last-minute bookings for live events and sports, Telenor Satellite has built a reputation for providing the best capacity to fit our customers' requirements. Our space-segment service for occasional use (on our own and on third-party satellites) can provide short-term capacity to distribute content via satellite for breaking news

events, regular part-time broadcasts across the globe and other services.

We can also provide reliable and convenient ground-based services, including uplink, turnaround and terrestrial fibre for the distribution of media services.



Support from the ground

Telenor Satellite's extensive investment in uplink facilities and associated infrastructure means that we are well equipped to offer our customers excellent ground-based satellite services from our various teleport locations.

Telenor Satellite has one main teleport in Norway as well as a large teleport in the UK. Nittedal teleport, near Oslo in Norway, is our largest teleport site, with more than 40 antennas that can operate satellites in the viewable arc from 45° West to 66° East (one third of the world's communication satellites). Our central London teleport has 10 antennas which look at satellites from 30° West to 50° East. These two 24-hour teleport facilities – combined with the baseband capabilities for broadcast services offered by our facility at Chiswick Park

in London – complement Telenor Satellite's extensive broad-reach satellite capacity.

Telenor Satellite's teleport facilities offer a large portfolio of services including encoding and multiplexing, IP streaming and full turnaround solutions. From our prime 1° West orbital position Telenor Satellite delivers more than 265 standard definition (SD) and high definition (HD) channels via direct-to-home (DTH) satellite television and about 45 digital radio stations, using DVB technologies.

Within Norway, Telenor Satellite provides technical services for the delivery of cable networks, IPTV, live Web TV transmissions and can also provide technical capability for hybrid VOD (video on demand) service platforms for both cable and DTH networks.

Seamless interconnections

Telenor Satellite's own multi-service network (MSNW) is a core video terrestrial network that is interconnected to all our satellite uplink stations in Europe and designed to provide enhanced scalability and redundancy, including TV, radio and data.

Customers can connect to the MSNW at a location of their choice to distribute their services over the 1° West platform. Customers can also connect to other providers through MSNW. All content is protected as it travels through individual virtual tunnels.

The MSNW also provides possibilities for the restoration of services via our teleports, which are connected to the network, thereby enhancing the already excellent reliability of Telenor Satellite's 1° West platform.

INVESTING IN THE FUTURE

Telenor Satellite continues to seek ways to innovate and expand our satellite-services portfolio, providing our customers with greater reliability and security to enable future growth. As we are committed to maintaining 1° West as the leading position in the Nordic region and as a primary DTH position in Central and Eastern Europe, Telenor Satellite has invested in THOR 7, a satellite that provides additional Ku-band capacity throughout Europe to support our customers long-term growth requirements.



About us

Telenor Satellite is a major European satellite provider of broadcast and broadband services for customers in the media, maritime, and oil and gas sectors.

Utilising a hybrid network that comprises our satellite fleet, teleports and a terrestrial fibre network, Telenor Satellite delivers turnkey broadcasting solutions, end-user connectivity and application services via satellite throughout Europe, the Middle East and Africa.

From the distribution of digital TV and radio content to millions of European homes to the provision of reliable communications in remote locations on land and at sea, we are committed to keeping our customers connected via satellite.

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