# **SPACE** NORWAY

# Annual Report

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# Introduction

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## Letter from the CEO

Satellites represent a critical and vital infrastructure for an increasing number of pivotal societal tasks. New capabilities within broadband communication, navigation, weather forecasting, earth observation as well as for military purposes have led most sectors to depend on satellite-based services



Photo: Surrey Satellite Technology

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Such capabilities also play an important part in the monitoring of environmental change and environmentally harmful emissions. Through our subsidiary Kongsberg Satellite Services, KSAT, the company contributes in the important efforts to detect oil spills and efforts to stop tropical deforestation<sup>1</sup>.

Norway's coastline is the longest in Europe, our ocean areas are approximately seven times larger than our total land area and the High North is of key strategic importance to Norway. As a result, Norway has a significantly greater need for satellite-based capabilities than most other countries in Europe. Therefore, Norway has pioneered the exploitation of space for societal benefits. Modern satellite-based capacities are required to enforce sovereignty, provide communication, search and rescue as well as for surveillance of our areas of interest. Furthermore, satellite-based services can represent redundant capabilities in the event of disruption in the terrestrial communications networks, in normal times but also in the event of a crisis situation.

In 2019, the Norwegian Government presented the "Space report<sup>2</sup>", a strategic assessment of the space sector in Norway. The paper concluded on the strategic importance of outer space for Norway and its expected increased importance in the future. The Norwegian Armed Forces is increasingly dependent on satellite capabilities to deliver on its mandate. Space Norway delivers important technology, infrastructure and solutions also to the Norwegian Armed Forces.



In the autumn of 2022, Space Norway was invited by the Norwegian Defence Commision to speak and to participate in a roundtable about Norwegian space activity and the importance of space for the future defence of the country. This took place at Ørland air field and was a part of the Defence Commission's visit to Trøndelag.

Later that autumn, Space Norway was visited by our owner, Minister Jan Christian Vestre who was informed about our company, the development of space related solutions and systems delivered by us. On his trip to the USA in September, he found time in his schedule to visit our field office and Northrop Grumman's factory in Dulles, Virginia where the ASBM satellites are being built.

<sup>1</sup>Space Norway owns 50% of KSAT <sup>2</sup>Meld. St. 10 2019 -2020 Jostein Rønneberg (left) at Ørland with major general Rolf Folland and leader of the Defence Commission Knut Storberget (right).

Photo: Jan Terje Hellemsbakken/ The Norwegian Armed Forces

Space Norway is a satellite operator set up to own, build and develop strategic space systems serving Norwegian societal needs. Such systems represent the basis for services covering many requirements that are vital to the Norwegian society - in normal times but also in the event of a crisis situation. Through our ownership of KSAT, the company has a leading position within ground station services for the downloading and distribution of satellite data. Space Norway is 100% state owned and represents a key part of the government's activities and ownerships in the space sector.

It is inspiring to see that the company's efforts provide tangible results and benefits for our society. In this context, I would like to highlight a few specific examples of our work this past year.

### Satellite-based broadband in the Arctic

Satellite-based broadband in the Arctic Satellite-based broadband communication is mainly based on geostationary satellites. Geostationary satellites do not provide satisfactory coverage north of the 75° N latitude. Civilian and military users have called attention to unmet needs for reliable and secure broadband in the Arctic. Civilian needs revolve around communication solutions for shipping, aviation, search and rescue operations and commercial activities in northern areas. Norwegian and Allied Forces require secure and reliable communication solutions during operations in the Arctic.

Space Norway reached an important milestone in 2019 when, after several years of preparation and analysis, we started the Arctic Satellite Broadband Mission (ASBM) programme. The ASBM programme consists of two satellites in high elliptic orbit over the Arctic. The high elliptic orbit enables the establishment of 24/7 coverage north of 75° N latitude. With an investment of approximately USD 450 million, this programme is Norway's largest satellite project to date.

Through the building phase in 2022, the programme has reached important milestones. Building these two very large satellite platforms is done through complex manual labour, and all platform units were completed during the winter of 2023. The first satellite has been assembled and is ready for the finishing tests in 2023. Logistical challenges combined with challenges at some of our sub contractors have created delays, giving us a time for launch some time in the first half of 2024. The building of the ground stations is finished and the programme has taken control of the satellite control equipment. Our operations team has gone through important training and delivered an impressive development of procedures and programmes for the command and control of both the space and ground based infrastructure needed for secure operations of the satellites.

### Delivery to the EU Commission

As a result of excellent cooperation with the Norwegian Space Agency, Space Norway signed a contract with the EU Commission for the delivery of space radiation information from space in 2021. The detection system will be installed on one of our ASBM satellites and will be used as a basis for the EU Commission's planning of radiation protection for the next generation of Galileo satellites<sup>3</sup>. This radiation detection payload has been developed by the Norwegian technology company IDEAS and is being built in cooperation with ESA, the European Space Agency. This work is on schedule and the radiation monitor has been fitted onto the satellite.



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« Space Norway has been given an important mandate for the Norwegian society. To deliver on this mandate, we must be able to understand future needs and requirements, demonstrate technological know-how and secure feasibility in all our projects »

Jostein Rønneberg, CEO Photo: Nina Holtan | ninaholtan.no

### Development of satellite-based radar surveillance over Norwegian waters

Surveillance of ship traffic in our vast ocean areas is demanding, both in terms of cost and from an environmental perspective. Norway represents NATO in the north and has a special responsibility for surveillance of these northern areas. Being able to monitor these vast areas is very challenging and costly using available systems today. Satellites are capable of monitoring and finding ships over extensive areas of ocean in a significantly more cost-effective way. In partnership with KSAT and Norwegian technology companies we have developed a concept and a solution for ocean surveillance using small radar satellites. Through 2021 we cooperated with the Norwegian Armed Forces and our partners in developing technology and systems that reduce technical risks for a possible test and demonstration satellite. In August 2022, we signed a contract with the Armed Forces that made the foundation for the development and operation of a test and demonstration satellite. This is the first part of building a capacity that will contribute to a significantly improved use of the Coastal Administration's and the Armed Foreces' operational units, such as ships and planes.

### The Svalbard fibreoptic cable

On January 7th, 2022, a breakage/interruption on one of our two fibreoptic cables securing communication between Svalbard and the mainland was detected. The incident received high media attention, demonstrating the importance of this connection and importantly, the risk assessments and security measures in the management of critical infrastructure. Seeing that the connection has two cables and redundancy, operations continued as normal, but for some time, the connection ran without backup capacity. The connection was re-established within short time and backup capacity was reinstalled. During the whole incident and through the repair process, central government, the Norwegian Communications Authority (NKOM), the Svalbard governor and the end users maintained close contact. As of now, June 2023, the cable layer ship "Cable Vigilante" is on a mission to repair the damaged cable.

The recently published Report to the Storting (Parliament) on electronic communication<sup>4</sup> lists Space Norway as an important part of Norway's basic digital infrastructure. In order to achieve our mission, Space Norway depends on a highly qualified workforce with deep insights into a variety of topics like; understanding future user needs, knowing existing and developing technologies, routines and capabilities for secure operations, and we must show regulatory expertise. We need to network and know the suppliers nationally and internationally. In addition, excellent program and project management capabilities are essential to ensuring effective project execution, as well as the capability to secure substantial funding for future investments. It is gratifying to see that Space Norway can attract skilled and motivated employees who contribute to successfully achieving our objectives. Our activities result in assignments for several Norwegian suppliers and ensure growth and development for Norwegian technology companies throughout the space industry.

We enter 2023 with a group order backlog of more than NOK 9 billion and an organisation employing highly motivated and skilled people. This is a solid platform for the future of our company and our ability to deliver strategic space-related capabilities serving Norwegian societal needs. I look forward to a new inspiring year with our talented colleagues. This spring however is my last as CEO of Space Norway. I am happy to see that after a thorough recruitment process, my colleague and deputy over the last six years, Dag H. Stølan has been appointed as my successor. His will start his new role on June the 7th.

I take this opportunity to give my thanks to everyone and wish Dag all the best

Space Norway – in space for Norway!

Jostein Rønneberg CEO



Jostein Rønneberg hands the baton on to Dag Stølan. Photo: Nina Holtan | ninaholtan.no

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# The Space Norway history

Norway was an early mover in adopting space technology, primarily because of the need for maritime communication and surveillance of vast ocean areas. The Norwegian space industry has focused on developing useful space-based services and has served as an instrument for preserving Norwegian interests. Space Norway is the result of a forward-looking Norwegian Space Agency in an early phase of space exploration + + + + + + Space Norway

Tromsø telemitry station 1967. Photo: KSAT 
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### Some milestones from the Space Norway history

#### 1967

Tromsø Telemetristasjon (TTS) is established by the Royal Norwegian Council for Scientific and Industrial Research to benefit from Tromsø's favourable geographic location for the download of data from satellites in polar orbits.

#### 1995

The Norwegian Space Agency organises parts of its activities as limited liability companies. Tromsø Satellite Station AS is set up to manage operational activities, and Norsk Romsenter Eiendom AS (today Space Norway AS) is set up as the owner of the infrastructure.

### 2003/04

Svalbard is in a geographically advantageous location for downloading data from satellites in polar orbits. Efficient transfer of large volumes of data to the mainland became a prerequisite for enabling further development of the Svalbard business. The Norwegian Space Agency therefore took the initiative to establish a 1,400-kilometre subsea fibreoptic cable connection between the mainland and Svalbard. Space Norway was given the assignment to establish the connection and own and operate this important infrastructure. The fibre connection became operational in January 2004 and is now a prerequisite for KSAT's activities on Svalbard as well as for the Longyearbyen community in general

### 1987

The Norwegian Space Agency (NRS) is established in 1987 when Norway becomes a member of the European Space Agency (ESA). TTS and its activities are incorporated into the Norwegian Space Agency in 1991

### 2002

In 2002 Space Norway separated its Svalbard satellite infrastructure business into a new subsidiary named Satellite Services AS. This company subsequently merged with Kongsberg Gruppen's activities on Svalbard and the merged company was named Kongsberg Satellite Services (KSAT). Since its formation in 2002 KSAT has been a 50/50 joint venture between Space Norway and Kongsberg Gruppen.

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### 2013/14

The company is formally given its current name, Space Norway. At the end of 2013, the ownership of Space Norway is transferred from the Norwegian Space Agency to the Norwegian Ministry of Trade, Industry and Fisheries.

#### 2016

KSAT and Space Norway launches a pre-project to develop a new satellite-based radar system for ocean surveillance.

### 2019

Space Norway finalized all contracts for and initiates the Arctic Satellite Broadband Mission (ASBM), an important milestone in the company's history. With an investment budget of approx. USD 450 million, ASBM is the largest satellite programme rolled out in Norway. Two satellites in a highly elliptical orbit will provide broadband coverage north of 65° N. Launch of the satellites is planned for 2023 carried by a SpaceX Falcon 9 rocket.

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### 2005

Space Norway finances the first antenna for satellite communication with the Troll Station in Antarctica.

### 2015

Space Norway acquires a transponder on Telenor's Thor 7 satellite dedicated to a communications link with the Troll Station in Antarctica. This enables KSAT to downlink information from satellites passing across the South Pole. Space Norway worked with KSAT and Telenor Satellite in 2013/2014 to realise the dedicated communications solution onboard Telenor's Thor 7 satellite. The communications link is leased to KSAT which is the only operator able to offer communications with satellites at both the North and South Poles

### 2018

The Norwegian Parliament approves conditional equity financing for the realisation of broadband communication in the Arctic.

### 2022

Space Norway commences the building of a test and demonstration satellite for radar based ocean surveillance. This project is the result of many years of preparation. Planned launch is in 2025.

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The picture shows an illustration of a test and demonstration satellite under development. The round umbrella shape is the antenna, solar panels on the sides function as energy source for the satellite. Foto: Surrey Satellite Technology

## New and unique capacity for ocean surveillance

Development of satellite based radar surveillance technology and systems



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### Background

Norway's coastline is the longest in Europe, and our maritime areas are approximately seven times larger than our land area. Norway represents NATO in the north and has a special responsibility for monitoring the northern regions, which are of significant and increasing strategic importance. Meeting the need for surveillance in these areas, crucial for asserting sovereignty, is challenging and very costly with the current capabilities.

Ships and planes are essential, but they have limited capacity and range compared to the vast maritime area that needs monitoring. Satellites offer a much more efficient solution for this purpose. Until now, Norway has not had its own satellite capacity for monitoring our maritime areas. Since 2015, Space Norway, in collaboration with partners, has been working on developing technology and specifications for a Norwegian-controlled satellite system to monitor our maritime regions. This effort has resulted in a decision to build a test and demonstration satellite tailored for radar surveillance of our maritime areas.

### Satellite systems have superior monitoring capabilities

Ships, planes, and satellites possess different characteristics and serve as complementary capacities. For monitoring vast maritime areas, satellites offer superior efficiency and capacity. Information from satellite-based radar systems will provide essential insights, situational awareness, and thus a basis for even better and more targeted utilization of ships and planes. This applies to search and rescue operations, fisheries surveillance, the ability to detect oil spills and environmental pollution, and situational awareness across the entire spectrum of crises. The swath width defines how far to the sides a radar can "see." The radar's altitude above sea level will affect the swath width – the higher the altitude, the wider the swath. Therefore, an aircraft will have a greater range than a ship, and a satellite will have a larger range than an aircraft. Area coverage is also determined by the speed and operational time per day. Satellite-based radar operates 24/7/365 and has significantly larger swath width and speed than radars on ships and planes. The figure below illustrates the different capacities' ability to provide radar coverage of our areas of interest - measured in the number of square kilometres per day<sup>5</sup>.



<sup>5</sup> This illustration shows the area each resource can cover per day. Actual operative use is entered in the calculatio, which gives: 250 days of sailing for one ship, 400 hours in the air per airplane and 24/7 for a satellite In the course of one day, a satellite can provide radar coverage of an area that is approximately 80% of our area of interest, and at a significantly lower cost per square kilometre compared to using ships and planes. Radarsatellites, ships, and planes are complementary resources. Efficient use of the overview provided by radar satellites can enhance the effectiveness of ships and planes. This is achieved by sending them more precisely to areas with detected activity, such as inspecting fishing activities beyond the range of the coast guard's radar.

Space Norway plans to establish a constellation of multiple radar satellites. With a constellation of such satellites, radar coverage of our entire area of interest can be achieved multiple times per day.

### Radar technology

Most people associate radar with an elongated antenna on a ship or at an airport that sweeps 360 degrees to transmit and detect radar signals. The word "radar" is an abbreviation of "Radio Detection and Ranging." In simple terms, the radar antenna emits a radio signal (which travels at approximately the speed of light) and captures reflections of this signal, also known as radar echoes. The system can then calculate the direction and distance to a reflecting object, such as a ship or an aircraft. Radar signals are unaffected by light and clouds, making them equally effective during the day and night, as well as through clouds and fog. The technology used onboard the radar satellite developed by Space Norway is known as "Synthetic-aperture radar," often abbreviated SAR radar. This technology allows for the creation of high-resolution radar images that, in practice, resemble optical images over long distances through the use of advanced algorithms and significant data processing. The method is based on radar echoes received by an antenna on the satellite, which moves in a straight line and continuously transmits radar signals. By compiling radar echoes over a given distance and employing substantial computational power, a radar image can be established for the specific distance that the radar has travelled. Hence the name "synthetic-aperture" because the radar image reflects a synthetic antenna that is significantly larger (equal to the distance it has travelled) than it would be if the antenna were stationary. This technology has been well-known for several years, but what makes the system developed by Space Norway special is its optimization for maritime surveillance, providing good image resolution along with extensive coverage

Below an illustration of the resolution and quality delivered by a satellite based SAR-radar. The pic on the left is shot by an optical photo satellite over Skøyen (Space Norway's offices) and Bygdøy. The pic on the right is a SAR radar photo from a satellite over the same place. The radar picture resolution is so accurate that you can see even small day cruiser boats and the pier structure of the marina. There is a 20 minute time gap in the pictures wich explains the different positions of the boats.



Photo: Surrey Satellite Technology Ltd

### Developing the first test and demonstration satellite

The project reached a significant milestone on August 25, 2022, when Space Norway signed contracts with suppliers and partners for the construction of the satellite. After several years of work on developing a high-tech and tailor-made solution, the construction of the satellite is now underway. The development and building of the first satellite are estimated to cost approximately NOK 500 million and are deemed crucial for advancing Norwegian technology and space industry.

The defense sector will be the primary customer for the project and has been a crucial partner in its development. KSAT is a central partner in developing the ground segment, responsible for its establishment and operation (antennas, systems, etc.). KSAT will also handle sales and the delivery of services from the satellite in both national and international markets. The payload (sensors and instruments) onboard the satellite is being developed and built by Norwegian subcontractors. The satellite itself is being built by Surrey Satellite Technology, a British company that is part of Airbus Defence and Space. The test and demonstration satellite is planned to launch in early 2025 as part of a "rideshare launch" (multiple satellites launched together using the same rocket) with a Falcon 9 rocket from SpaceX.

Space Norway is the satellite operator and will own the satellite. Provided that the performance meets expectations, Space Norway plans to establish and own a constellation of several similar satellites. Such a constellation would provide near real-time coverage of our entire maritime area of interest. The technology used is unique and tailored to the specific purposes of Space Norway, allowing for the detection of



Photo: Nina Holtan | ninaholtan.no

relatively small vessels over a vast ocean area in a short period. Satellite-based radar will also play a crucial role in combating illegal fishing, conducting rescue operations, and monitoring oil spills and environmental pollution. This constellation will give Norway a powerful strategic capacity under national control, enabling the country to undertake critical surveillance tasks independently.

Our MicroSAR team: from left Torolf Bjørnsgaard, Andrea Alvsaker, Patrik Mandelin, Birgit Wahl, Karl Petter Sundby, Per Atle Våland.

# **Broadband in the Arctic**

Traditional solutions for broadband communication via satellite are mainly based on geostationary satellites. These are satellites that are located above the equator and provide communication coverage to large parts of the Earth's surface. Communication via satellite requires that the user terminal has a clear view of the satellite. In areas north of the 75° N, geostationary satellites are too low above – or even below – the horizon for communication to work. Broadband via satellite in these areas has therefore not been possible. Space Norway's new satellite constellation in a highly elliptical orbit over the Arctic is about to change this.





### Photo: Northrop Grumman

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Reduced ice coverage in the Arctic has led to increased shipping traffic and other activities in the Arctic. It is estimated that up to 80% of all ship traffic in the Arctic takes place in waters within the Norwegian economic zone or within the responsibility zone for search and rescue missions. Furthermore, there is an increase in the commercial air transport above the Arctic with transatlantic flights crossing the polar region. Several nations are increasing their activities in the Arctic, and the geopolitical and environmental significance of the area is increasing. For decades, there has been an unmet need for satellite-based broadband communications in the Arctic. In partnership with the Norwegian Armed Forces, Inmarsat and the U.S. Space Force, Space Norway will now establish such communication services.

On announcement of the ASBM programme, CEO of Space Norway Jostein Rønneberg stated:

«In close collaboration with Inmarsat, the authorities in Norway and the United States, we are now establishing a strategically important capacity for everyone operating in the Arctic and re - quiring reliable access to broadband communication. Our focus in this programme is the value it creates for users such as fishermen, scientists, rescue services, the coastguard, our own and allied armed forces and others.»

For many years Space Norway has worked on the study, assessment and financing of satellite-based broadband in the Arctic. The Arctic Satellite Broadband Mission (ASBM) programme was given the go-ahead in 2019. S Space Norway will own and operate the satellite







system and is responsible for system specification, design, procurement and program management. The investment budget is approx. USD 450 million (approx. NOK 3.8 billion). So far, ASBM is the largest satellite programme ever rolled out in Norway. The programme is fully financed by a combination of equity, bank loans and prepayment from our partners.

Construction of the satellites at Northrop Grumman's plant in Dulles, Virginia, began in 2019, and the satellites are scheduled to be operational in the first half of 2024. The satellite constellation consists of two satellites that will be launched into a highly elliptical orbit over the Arctic. The lowest and highest points of the orbit above Earth will be 8,100 and 43,500 kilometres respectively. Each orbit for the two satellites takes 16 hours, and each satellite will provide broadband coverage across the Arctic for up to ten hours per orbit. Together, the two satellites will provide continuous 24/7 broadband north of 65° N latitude.

The satellites are about the size of a van (approx. 3m x 3m x 4m) and weigh 2 tons each without fuel. With full fuel tanks, the two satellites weigh a total of 7,200 kilos when launched. Each satellite measures 27 metres end to end when its solar panels are unfolded.

The satellites carry payloads supporting our three partners Inmarsat, the US Space Force and the Norwegian Armed Forces. An agreement has been signed with SpaceX for launch with a Falcon 9 launch vehicle. Launch from the Vandenberg Air Force Base in California is scheduled for the first half of 2024.

As per agreement with Space Norway, KSAT is establishing the ground segment for the programme. Three new 9-meter antennas are ready in northern-Norway for communication with the satellites, and three additional antennas will be built during 2023.

The Falcon 9 rocket from SpaceX is the world's first reusable launch vehicle. Lifting capacity to geostationary transfer orbit is 8.3 tons, and for low orbit (550 km) it is more than 22 tons.

The rocket is 70 metres tall and has a diameter of 3.7 metres. The satellites are placed on top of each other inside a capsule (fairing) measuring  $13 \times 5.2$  metres on top of the rocket.

Launch is performed in two stages. The first stage is powered by nine Merlin engines using liquid oxygen and kerosine. The second stage is powered by one Merlin engine that can be started and stopped multiple times and is used to place the satellites in the correct transfer orbit. From there, the satellites will move into orbit using their own fuel system. This manoeuvre takes approx. 10 days.



Minister Jan Christian Vestre and Oddveig Tretterud at the Northrop Grumman factory in Dulles, Virginia where our ASBM sattelites are being built. Photo: Northrop Grumman

### Key figures for the group<sup>\*</sup>





\* All numbers in NOK 1000 \*\* Employees including KSAT: 337

### Companies in the group



Key figures for the group <sup>*</sup>	2018	2019	2020	2021	2022
Revenues	476 029	513 684	547 383	654 088	885 900
EBITDA	131 301	178 754	168 674	155 648	233 918
Operating profit	75 080	111 900	97 553	73 456	131 058
Net income	41 639	109 675	185 744	16 498	65 542
EBITDA margin	28 %	35 %	31 %	24 %	26 %
Operating margin	16 %	22 %	18 %	11%	15 %
Earnings per share	16,0	42,2	71,4	6,3	25,2
Return on equity	8,2 %	19 %	23 %	1%	5 %
Order backlog	1 654 223	7 403 665	7 487 976	7 521 013	9 041 439

\* All numbers in NOK 1000

Key figures for the group,					
financial position*	2018	2019	2020	2021	2022
		1			
Total non-current assets	530 914	1 298 910	2 536 003	3 330 918	3 716 580
Of which construction in progress	-	697 665	1 802 389	2 432 084	2 795 634
Total current assets	323 633	547 291	959 120	997 766	1 122 070
Total assets	854 547	1 846 200	3 495 124	4 328 683	4 838 650
Total equity	530 248	639 978	980 012	1 308 572	1 376 105
Annual investments in					
new infrastructure	112 088	834 849	1 308 214	877 107	488 521
Equity ratio (%)	62 %	35 %	28 %	30 %	28 %

Accounting figures for 2019 -2021 have been audited. Accounting figures for 2017-2018 have been restated according to current consolidation principles to show historical development. The company accounts for 2016-2018 have been audited, but the pro-forma restated figures for 2016-2018 presented in the tables have not been audited.

Selected key performance					
indicators (KPIs)*	2018	2019	2020	2021	2022
Uptime Svalbard fibre connection Uptime AIS satellites	100 % 92,0 %	99,995 % 96,1 %	100 % 98,7 %	100 % 97,5 %	100 % 98,8 %
Uptime satellite connection to Antarctica	100 %	100 %	100 %	100 %	100 %
Non-current assets per employee Operating expenses in % of	5 767	30 341	49 155	62 185	60 586
non-current assets	79,0 %	10,3 %	8,2 %	4,8 %	5,7 %
Sickness absence rate	1,21 %	2,32 %	2,01 %	1,4 %	2,3 %
Number of employees, year end	22	27	39	42	48

Key figures for Space Norway and its subsidiaries in which the company has a controlling interest. KSAT, the joint venture, is not included in the table above.

\* All numbers in NOK 1000

### Definisjoner

- EBITDA: Earnings befo amortisation **EBITDA margin: EBITD** Operating margin: ope
- Earnings per share: Ne company
- Return on equity: Net in
- Order backlog: orders I have not been effected the gross profit method ting the order backlog backlog in the joint ven currency, conversion to exchange rate as of 31 December 31st / total a
- Fixed assets per emplo cial fixed assets) / num
- Operating expenses in excluding depreciation of fixed assets at the e

		Space Norway

re interest, taxes, depreciation and
A / revenues
rating profit / revenues
t income / number of shares in parent
ncome / average book equity
based on contracts entered into that at the time of reporting. For the group, d is also applied as a basis for calcula- so that it includes 50% of the order ture KSAT. For contracts in foreign Norwegian kroner is based on the December. Equity ratio: book equity assets December 31st
yee: (book value of fixed assets – finan- ber of employees at the end of the year.
<u>% of fixed assets:</u> operating expenses and write-downs in % of the book value nd of the year

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Space Norway

Value chain for satellite based services Space Norway's strategic priorities The Svalbard fibre-optic cable

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and develop new space related capablities ment and operation of space related cture

# Value chain for satellite based services

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Norsat TD to be launched in the spring of 2023.

### Value chain for satellite based services

A range of important and critical societal functions depend on information from satellites. Examples are navigation, communication and broadband in areas without terrestrial networks, dissemination of emergency messages, television broadcasts, rescue services, weather forecasts, surveillance of land and ocean and for military purposes. In 2022, the consulting firm Euroconsult estimated the value of the satellite industry globally to be USD 464 billion, an increase of 8% last year. Euroconsult estimates the space industry to grow to USD 737 billion by 2032, an annual growth rate of 5%. In "The Space Economy Report 2022", Euroconsult presents the space industry value chain as shown to the right<sup>6</sup>

Space Norway's role is to manage and develop strategic space infrastructure to serve important Norwegian societal needs. In the value chain above, Space Norway is a satellite operator. This part of the value chain is characterised by large and complex development projects, long-term customer contracts, significant invested capital, and a relatively low return on average capital employed (ROACE). Space Norway provides infrastructure services at wholesale level to a limited number of major customers, who in turn serve a wide range of end customers. Through the jointly controlled subsidiary KSAT, the group is also represented in the ground segment and downstream information processing and product delivery sectors. KSAT is the world's largest provider of ground station services for communicating with, controlling and downloading data from satellites in polar orbits.

<sup>6</sup> Euroconsult, "The Space Economy Report 2022, 9th Edition"



+ + Space Norway

Development and Manufacturing

Value USD 29 milliarder

### Launch services Value USD 10 milliarder

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**Ground segment** Value USD 5 milliarder

### Satellite operators Value USD 16 milliarder

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### Satellite service providers Value USD 364 milliarder

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### End users, consumers, governments and businesses

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### The importance of the space industry to the Norwegian society

Norway was an early mover with respect to the use of satellites and space. This was partly due to our particular geographical location and specific user needs. Maritime safety and ocean surveillance were particularly important user needs. In 1974 Norway acquired the first domestic satellite system in Western Europe. Norway became the second country to establish satellite television broadcasting and was for a long time the leading country in Europe within maritime satellite communications. Following the establishment of the Norwegian Exclusive Economic Zone in 1977, Norway also became a pioneer in utilising radar satellites to search for ships and oil spills through clouds and in the dark.

The strategic importance of space-based infrastructure is increasing. One key reason is the importance for the exercise of sovereignty and ability to provide critical services. As a result of developments and changes to the space sector, the Norwegian Government published an updated strategic space policy review in 2019<sup>7</sup>. The previous space policy review was released in 2013<sup>8</sup>

In the report, the Government emphasises that Norwegian public investment in space is a tool for leveraging Norwegian interests. The review defines the following four goals for Norwegian space activities:

for business and public benefit

#### 1 2 3 4

- **1.** Promoting profitable businesses, growth, and employment
- 2. Meeting important societal and user needs
- **3.** Ensuring satisfactory security for important space infrastructure
- 4. Securing Norwegian foreign, security and defence policy interests in space related activities

Society's dependence on electronic communications infrastructure, including satellite-based communications, is increasing. The Space Review states that space infrastructure is playing an increasingly important role in safeguarding basic national functions, and potential interruptions in this infrastructure may therefore have serious consequences.

The strategic importance of the space sector is expected to increase in the future. Norway must be able to identify its own user needs, develop solutions and control infrastructure of particularly wide-ranging national importance. The review emphasises that the space industry by itself represents a strategic competence base for safeguarding critical functions for the nation.

The importance of national ownership and control of space infrastructure is recognised in most countries. The COVID-19 pandemic and the actions of some nations to secure scarce goods in times of crisis, serve as a reminder that the importance of national control is often not evident until a crisis occurs. The ASBM programme under the auspices of Space Norway is highlighted in the Space Review as an example of national self-sufficiency

En strategi for norsk romvirksomhet



«The fact that the Norwegian Government chooses to publish a new strategic review now is due to the current rapid development in the space sector, the strategic importance of space and satellite-based services for Norwegian society, and the strategic importance of space for the Armed Forces, civilian life and future value creation.»9

Value chain for satellite based services

<sup>9</sup>Meld. St. 10 Chapter 1



Space Norway

### Meld. St. 10 (2019 - 2020)

Melding til Stortinget

# Høytflyvende satellitter – jordnære formål

# Space Norway's strategic priorities

Space Norway is 100% owned by the Norwegian Ministry of Trade, Industry and Fisheries (NFD) and represents a key part of the Norwegian Government's activities and assets in the space sector. Space Norway's assets and operations include technology and infrastructure in an area where the Norwegian Government has a need for control and supervision. As part of the control mechanisms, the company has been made subject to the Norwegian Security Act. Space Norway is a company in which the Norwegian Government's priority as owner is to attain the most cost-effective operations. The company is financed entirely through its own income and does not receive grants from the Norwegian Government.

28 Space Norway's strategic priorities

+ + + + Space Norway

Minister of Industry and Fisheries Jan Christian Vestre visiting Northrop Grumman where our ASBM satellites are being built. Photo: Northrop Grumman The state ownership report<sup>10</sup> emphasises the purpose of the Norwegian Government's ownership:

«The Norwegian Government's reason for its ownership of Space Norway is the management and continued development of security-critical space-related infrastructure supporting important Norwegian societal needs. The Government's aim as owner is to offer cost-effective and properly managed space-related infrastructure supporting important Norwegian societal needs»

The group's vision is: "We deliver tomorrow's space systems for Norwegian societal needs". Space systems are defined as platforms and infrastructure working together in space. The company's overall strategic priorities are based on the Government's above defined purpose and are briefly discussed below.

## Establish and develop strategic space related infrastructure

The group's mandate is to provide services for important Norwegian civilian and military functions. The group's success requires both comprehensive technological insight as well as a good understanding of future user requirements and Norwegian political priorities. The Space industry is experiencing increased activity and is characterised by a high degree of innovation. A good understanding of tomorrow's technology is consequently required to make the right investment decisions today.



10 Meld. St. 8 (2019-2020)

Illustration of NorSat-3: Norwegian Space Agency In the coming years, a significant increase in the number of active satellites is expected, especially small satellites in low earth orbit (LEO<sup>11</sup>). Rights to, and use of frequencies for satellite communication is a limited resource. The strategic value of existing satellite systems with allocated frequency rights is expected to increase in the coming years. In light of this, frequency coordination becomes an increasingly important and time-consuming discipline.

### **Cross sectoral partnerships**

Norwegian users of space related services cover a wide range of civilian and military entities. Development of single purpose satellites are often discouragingly expensive. Space Norway's expertise and its national and international relations enables development of tailored "dual/multi use" solutions by joining needs from different users on a single platform. This can represent significant savings in terms of reduced investment (CAPEX) per user/function. In this regard, the ASBM programme serves as a good example. In this programme Space Norway has combined commercial broadband with military payloads for the US Space Force and the Norwegian Armed Forces. Without Space Norway's facilitation of this partnership, the Arctic broadband capabilities would be significantly more expensive for the users of the system.

### Properly managed space-related infrastructure

Satellite services are used in many critical societal functions such as rescue services, communications, navigation, defence, earth observation and surveillance. Interruptions or loss of satellite services could have major consequences for life and health and could also lead to extensive economic losses. The strategic importance of outer space in the implementation of security policies is increasing. In this respect Norway has a particular responsibility in the High North. Space Norway is responsible for space infrastructure that supports long-term bilateral Norwegian obligations. Furthermore, Space Norway's activities are subject to the Norwegian Security Act and the Norwegian Electronic Communications Act. This requires high standards within security and risk management capabilities. The group's expertise related to strategic matters, risk assessment and security measures is high and expected to further grow in the future.

### **Efficient operations**

The space industry in general is characterised by the need for large investments and a highly skilled workforce. A high level of expertise is a prerequisite for the ability to develop new solutions. Space Norway is growing. In particular the ASBM programme represents a significant growth boost. Continuous streamlining of the organization is a priority, and gradually increasing efficiency is expected as the group continues to grow. Access to equity and debt for financing new programmes will be of key importance to achieving the group's strategic goals.

## Contributing to the development of Norwegian technology and space industry

The national space review6 emphasises the strategic importance of space and satellite-based services for the Norwegian society at large, for future value creation, as well as its strategic importance for military purposes. Priorities are to secure Norwegian foreign, security and defence policy interests in space. Space Norway is responsible for contributing to the fulfilment of the objectives of the national Space Strategy, e.g., by ensuring adequate security of important space infrastructure, delivering solutions that meet societal and user needs, and by contracting qualified Norwegian subcontractors and promoting growth for the national space industry. Through the ASMB and MicroSAR programs, orders for over NOK 705 million have been made with Norwegian technology companies. Furthermore, these programmes attract highly skilled employees who constantly develop their competence. The programmes contribute to national self-sufficiency and provide strategic capabilities under Norwegian control. In the ASBM programme Space Norway has entered into a significant agreement with KSAT for establishing and operating the ground segment of the programme. This alone creates 13 new jobs in Tromsø.



Space Norway

1 2 3 4

# The Svalbard fibre-optic cable connection

# The story behind the world's northernmost subsea fibre connection

Svalbard has an ideal geographical location for downloading data from satellites in polar orbits. SvalSat, the Svalbard satellite ground station at 78 degrees north, is the northernmost ground station in the world and started operation in 1997. However, development of the business depended on efficient transfer of large volumes of data to the mainland. + + + + + + Space Norway

### ↑ Photo: Subcom

At this time, SvalSat was part of Norsk Romsenter Eiendom AS (later renamed Space Norway AS), a company owned by Stiftelsen Norsk Romsenter (NRS). NRS was concerned that SvalSat would lose out on commercial opportunities because of the lack of fibre connection to mainland Norway. NRS believed that a subsea fibre connection would be essential to ensure the future development of SvalSat's activities. The telecommunications operator at Svalbard saw no commercial basis for investing in an approximately 1,400-kilometre subsea fibre optic cable connection. In 2002, NRS initiated its own assessment and planning of a fibre connection from Longyearbyen to the mainland, with the objective of establishing such connection without any government financing.

With Space Norway as a tool, NRS succeeded in this project. Financing was secured through a combination of long-term contracts, debt, prepayments from key customers, and funding from Space Norway. Customers and partners included NASA, NOAA, KSAT, Andøya Rocket Range, Telenor and Uninett<sup>12</sup>.The construction was done in 2003 and the fibre connection became operational in January 2004. The fibre connection has been of important strategic value for the growth and development of KSAT. SvalSat is now the world's largest ground station for downloading data from satellites in polar orbits. Today, both KSAT and Space Norway are two successful spin-off businesses from NRS (Norwegian Space Agency).

The KSAT ground station on Svalbard, SvalSat has more than 100 operative antennas Photo: KSAT



Space Norway

<sup>&</sup>lt;sup>12</sup> NASA is the National Aeronautics and Space Administration, and NOAA is the National Oceanic and Atmospheric Administration, a department under the Unites States Department of Trade. KSAT is Kongsberg Satellite Services

The fibre connection consists of two separate cables that connect Longyearbyen to mainland Norway. The distance of approx. 1,400 km corresponds roughly to the distance between Oslo and Paris. The cables are buried approximately 2 metres in selected areas to protect against destruction by fish trawling and anchoring of ships. The sea depth reaches as much as 1,670 metres just west of Svalbard. At the time of construction, it was the world's deepest fibreoptic cable. Tyco Communications (now SubCom) was the contractor for the project. The anticipated technical service life of the cables is 25 years. It is now 19 years since the cables became operational. The operating track record of the Svalbard connection has been excellent with few incidents that have led to interruptions of the service. During the period 2018-20, Space Norway carried out significant security related upgrades to the fibre connection. In January of 2022, one of the fibre cables was damaged west of Spitsbergen. This did not result in any disconnection of the communication from Svalbard to the mainland, but the redundancy was down for two weeks until a temporary repair was done. The damage is to be repaired in June of 2023 by the cable layer ship "Cable Vigilance", a part of the Atlantic Private Maintenance Agreement (APMA).

The primary motivation for establishing the fibreoptic cable in 2004 was to ensure the growth and development of the satellite business at SvalSat. Today, the fibre connection also represents a critical resource for the society at Svalbard and enables modern electronic communication services. These are services necessary to maintain and develop society as well as Norwegian presence on the archipelago. The fibre connection is considered part of the national critical infrastructure.

### + + + + + + + Longyearbyen Svalbard



+ + + + Space Norway

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Harstad Andøya

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The fibre optic cable connecting
 Longyear with the mainland.

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National and international companies and entities depend on a functioning fibre connection to Svalbard. Information downloaded at SvalSat and distributed via the fibre connection is important for a number of purposes such as weather forecasting services, surveillance of ship traffic, environmental monitoring, development of ice maps for the Arctic and communication services in the critical phases of rocket launches12. The connection is also important for KSAT's contribution to Galileo, Europe's satellite-based navigation system13. Space Norway offer transmission capacity at wholesale level to a small number of customers, who in turn provide communication services in the retail and commercial markets. End customers and users of the fibre connection include a wide spectre of businesses: the society in general, the coastal radio service, Helsenett, Avinor, the Governor of Svalbard, including police and SAR (Search And Rescue) resources, local government in Longyearbyen, the Norwegian Coastal Administration with services for maritime security, EUMETSAT<sup>13</sup>, NASA, NOAA, Galileo, Iridium, ESA, the Norwegian Mapping Authority as well as university and research units on the archipelago such as UNIS, the Nansen Environmental and Remote Sensing Center and the Norwegian Institute of Marine Research etc.

Space Norway has started evaluating a possible replacement of the existing fibre connection, and the ambition is for it to be in place before the life span of the current cable system expires in the end of 2028.

> <sup>13</sup>Galileo is a system for satellitenavigation established by The European Union and The European Space Agency. The system is an alternative to the military and American controlled Global Positioning System(GPS) and the Russian GLONASS. EUMETSAT is The European organization for meteorology satellites.



Head of Infrastructure Dag Stølan (right) and advisor Jens Olav Frorud (left) showcasing the fibre cable + Photo: Nina Holtan | ninaholtan.no

## **Business units**

Activities in Space Norway have increased significantly in recent years, in line with the development and implementation of several important space programmes. Activities are split into two main categories, a) establishment and development of new infrastructure and b) sustainable management and operation of space-related infrastructure. The group's main activities in 2022 are illustrated in the figure to the right

### + + + +

Group functions: security, risk assessment, frequency coordination, technological literacy, space industry network, administration, financing

Establish and further develop space related infrastructure Sound management and efficient operation of strategic space infrastructure

Identify user needs. Ongoing development projects, for instance satellite based radar surveillance

Implementation of programs decided by the Board of Directors, such as the ASBM program Operation and maintenance of the Svalbard fibercable and Satellite connectivity to the Antarctica

Operation of the AISsatellites for monitoring of ship-traffic, owned by Norwegian Coastal Authority

Ongoing development of KSAT (joint ownership with the Kongsberg group) Space Norway

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Space related infrastructure for important Norwegian + societal needs

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### Establish and develop new capabilities

An important part of the group's mandate is R&D and development of strategic space-related infrastructure. Satellite projects are technically complicated, resource intensive and typically require 2-5 years from investment decision to launch/operation, requiring more time when new technology is involved. Space Norway

Hans Chistian Haugli, Director Innovation and Development (right) with Lrs Løge, Program manager VDES (middle) and Ivar Spydevold, CEO Statsat AS (left) Photo: Nina Holtan | ninaholtan.no 1 2 3 4

Development projects at Space Norway are normally structured according to the following three steps:



# + + +

Step 1

### Identifying user requirements

Space Norway engages in continuous dialogue with relevant user groups to identify future needs for satellite-based capabilities. Identified user requirements are assessed according to usefulness, technical feasibility and risk prior to initiation of a possible pilot project.

Examples of user groups are the Norwegian Armed Forces, the Norwegian Coastal Administration, the rescue services as well as agencies/ users in ministries that are involved in or are responsible for satellite-based infrastructure and services etc. The technical and industrial competence in Space Norway represents an important basis for evaluating future satellite-based capabilities in collaboration with relevant user groups

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+ + + + + Space Norway + + + + + + +

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Step 2

# Pilot projects and evaluation of new capabilities

Defined requirements are assessed in relation to current technological solutions and cost-benefit considerations. The ASBM programme is based on a specific and unmet need for satellite-based broadband in the Arctic.

An initial cost-benefit analysis showed that the programme was too expensive for a single user. In the evaluation phase, Space Norway succeeded with significantly improving the cost-benefit ratio by negotiating a joint project between three users and thus forming a basis for an economically feasible project. In Step 2, analyses of utility, risk and a financial analysis are undertaken for all projects that are recommended for step 3, implementation.

### **Financing and**

Step 3

When a project is initiat run the project. An appr structured as a separate

The project organisation and expertise, such as to management, negotiation ensures that an approprinisation is put in place p capabilities.

20	Establish a	nd develop nev	v capabilities					

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		+ Space Norway	

implementation	
ed, a project organisation is set up to oved programme may, if beneficial, be	
e limited liability company.	
n is staffed with applicable resources echnical, security, regulatory, project on and financing. Space Norway also riate and cost-effective operations orga- prior to launch and operations of new	

Development activities in Step 2 – capabilities for maritime surveillance and emergency preparedness In 2022, the activities in Step 2 were mainly associated with two development projects focusing on maritime surveillance and emergency preparedness in the High North. The two most important projects are MicroSAR[1] and VDES. MicroSAR<sup>14</sup> is a development project in cooperation with KSAT and FFI on maritime surveillance based on small radar satellites. If realised, this project will provide a very capable radar capacity for surveillance of Norwegian waters. The project has defined a technical solution and identified suppliers of critical components. The payloads are developed and manufactured in Norway. The decision on whether to build a test and demonstration satellite is expected in 2022. In 2021, through cooperation with the Armed Forces and our partners, we have developed technology and systems to reduce technical risk with the test and demonstration satellite. If the capacity is realized with expected performance, the project will contribute to a significantly improved situational awareness and cost effective use of and increased capacity for the Coast Guard and the Armed Forces operative units. The plan is to establish a Norwegian constellation of MicroSAR satellites. Depending on user needs, this may well become one of Norway's largest satellite constellations.

VDES (VHF Data Exchange System) can be seen as next generation AIS. It uses the same frequencies as AIS and offers two-way communication with ships via satellite. Given the advantages the VDES-system presents, there is reason to believe that this system in the future will provide an important communications platform for global shipping and give an important contribution for increased safety and digitisation of ship traffic. Since 2017, Space Norway has seen its VDES payload on board the NorSat-2, which has been used to develop and validate the VDES technology and the surrounding systems. Over the last years, a new functionality on the payload, developed by Kongsberg Seatex, has demonstrated several maritime services through exhcange of data via VDES. In 2022, in cooperation with the Norwegian Coastal Administration and the Maritime Safety Agency (EMSA), broadcasting of ice maps, a service for coordinated efforts in search and rescue operations and a service for mandatory ship reporting was demonstrated. Preparations for the launch of NorSat-TD in April of 2023 has been an important activity in 2022. NorSat-TD will carry a new VDES payload designed to test a new service for precise time via satellite based VDES. Another system for surveillance of service quality for Space Norway's VDES infrastructure will be ready by 2023.

### Development activities in Step 3 – implementing the ASBM programme

A decision to initiate the programme was made in 2019. The programme consists of two satellites with associated ground segments. The satellites will follow a highly elliptical orbit over the Arctic and will provide continuous broadband coverage north of the 65° N latitude. The satellites and payloads are under construction at Northrop Grumman in the United States. Each satellite weighs about 2 tons and measures 3x3x4 metres. With solar panels in extended position, the wingspan is 27 metres. One of the payloads, a radiation monitor, is being built by the Norwegian company IDEAS in collaboration with the Norwegian Space Agency and ESA.

An agreement has been made with SpaceX for launch on a Falcon 9 rocket. In 2019, an agreement was entered into with KSAT for construction of the ground segment for the programme. In parallel with the construction of the satellites, Space Norway and KSAT are jointly establishing a satellite control centre in Tromsø, Norway for the operation of the satellites when they become operational. In 2022, the programme has been in the building phase and important milestones have been reached. All platform units will be finished by the winter of 2023. The first of the two satellites is assembled and made ready for the finishing tests that will take place in 2023. Logistical challenges as well as challenges at some of the sub contractors have created delays, which gives us a probable launch in the first half of 2024. The building of the ground stations finished and the programme has taken control of the satellite control equipment. Our operations team has gone through important training and delivered an impressive development of procedures and programmes for the command and control of both the space and ground based infrastructure needed for secure operations of the satellites.

With a total investment of approx. USD 450 million, this programme is Norway's largest satellite project to date. The programme is fully financed by a combination of equity, bank loans and prepayments from our partners. The order book at the end of 2022 is at USD 624 million. Development and operations are organised in the 100% owned subsidiary Space Norway HEOSAT AS. Key financial figures are shown in the table below.

Key figures - Space Norway Heosat AS	2022	2021
Revenues	-	-
Other operating expenses	19 621	25 979
Operating profit	-19 621	-25 979
Net financial expences (income)	-25 462	22 356
Net income (loss)	- 45 083	- 55 687
Capitalized investments for the period	2 927 981	2 432 084
Total assets	3 348 835	3 069 712

Figures in NOK 1000

# Management and operation of space-related infrastructure

- + + + + Space Norway

Position and orbit path for the AISSAT-1, AISSAT-2, NORSAT-1, NORSAT-2 and NORSAT-3. The red dots represent AIS signals from ships received by the satellites. The picture is from the Statsat control room. Photo: Statsat

### Fibre connection to Svalbard and satellite connection to Antarctica

The fibreoptic cable connection to Svalbard became operational in January 2004. The distance between Svalbard and the mainland is roughly 1,400 kilometres. The connection consists of two separate fibreoptic cables and represents significant transmission capacity. The connection represents necessary infrastructure for distribution of data downloaded from the KSAT satellite station at Svalbard. It also represents a critical resource for the society at Svalbard and provides it with modern e-com services. The fibre connection is defined as critical infrastructure.

Ownership and operations are organised in the parent company of the group, Space Norway AS. Income is based on wholesale of transmission capacity to a few major customers, where capacities of 10 or 100 Gbps are offered. The customers are KSAT, Telenor and Uninett. The pricing of services from the fibre connection is largely based on previously entered contracts and does not represent updated cost figures for operation of the Svalbard fibre connection, therefore the fibre connection operations represent a deficit for the group.

In January 2022, an interruption occurred on one of the two connections. The fibre consists of two redundant connections between Longyearbyen and Harstad. This means that the Svalbard fibre remains fully operational in the event of one of the two connections failing, however running without backup capacity. Without this redundancy, Svalbard would have lost its mainland connection. In cooperation with Subcom, the error has been temporarily amended and redundancy for this connection is re-established. Efforts are now being made to for a final repair of the damage wir repair vessel in June 2023.

Space Norway also provides the Troll Station in Antarctica with a satellite broadband connection. The capacity is delivered via a long-term lease of a dedicated capacity on the Thor 7 satellite. The satellite is owned and operated by Telenor Satellite, a subsidiary of Telenor ASA. The capacity is sub-leased in its entirety to KSAT. The accounts related to the Svalbard fibre connection and satellite connection to Antarctica are included in the parent company's profit and loss accounts.

#### The KSAT joint venture

KSAT is a joint venture owned 50/50 by Space Norway and Kongsberg Defence and Aerospace, a division of the publicly listed company Kongsberg Gruppen ASA. KSAT is a provider of services related to the operation and reception of data from satellites, as well as the use of satellite-based information in global services.

KSAT is a world leader in its category and has three main business areas, ground station services, earth observation services and Government Programs, where ground station services is the largest business area. In 2022, antenna capacity was increased, and at the end of the year KSAT operated approximately 300 antennas and made approximately 1,040,000 satellite contacts per month. The company's operations include ground stations for communication with satellites, and for reception and processing of data in near real time and also services related to the use of such data. KSAT operates 26 ground stations i different countries and is headquartered in Tromsø with offices at Svalbard, in Oslo, Stockholm and Denver.

#### a final repair of the damage with a specialised offshore subsea cable

KSAT and its subsidiaries continue to grow both in terms of turnover and profit. Revenues in 2022 were 1,471 MNOK compared to 1,232 MNOK i 2021, an increase of approximately 19%. 81% of the revenues came from customers outside Norway.

The investments in operating small satellites have proven to be profitable and KSAT Lite has become an important part of the company's total operation.

Through 2022, KSAT has delivered high-resolution satellite imagery for the monitoring of the world's rainforests through a contract with the Ministry of Climate and Environment. In 2022, KSAT has continued its development of a ground network for support of lunar relay-satellites. Sales amounted to NOK 2,195 in 2022. KSAT has long term contracts with many of the world leading space organisations in addition to commercial players. KSAT's leading position internationally comes from operational experience, technical expertise and cost efficient infrastructure with a unique geographical position. An excellent and unique infrastructure (pole-to-pole), increasing need for satellite-based services and an efficient organisation are among the key reasons for the positive trend for the company. The customer base is stable with a long-term perspective. This means that the business can focus on continued growth, innovative improvement and the establishment of new business areas. Key figures for the past two financial years are shown in the table on the right<sup>15</sup>.

> <sup>15</sup>KSAT accounts are consolidated in Space Norway group accounts in accordance with the gross profit method

#### Kongsberg Satellite Services, group

Revenues EBITDA Operating profit Net income

Total non-current assets Total current assets Total assets Total equity Total liabilites

Order backlog Number of employees, year end

Figures in 1000 NOK

2022	2021
1 471 425	1 232 423
561 446	475 297
382 551	337 702
320 591	274 183
1 562 891	1 438 336
738 745	537 789
2 301 636	1 976 125
1 433 716	1 177 574
867 920	798 551
4 381 000	3 633 500
360	295

### Operation of the Norwegian Coastal Administration's AIS satellites, Statsat AS

A little over a year after its establishment in 2013, Statsat AS took over the management of the AISSat-1 and AISSat-2 satellites. Since then, the company has been responsible for running Norwegian small satellites on behalf of the Norwegian Coastal Administration and the Norwegian Space Center. With the launch of NorSat TD in April 2023, Statsat will operate six Norwegian small satellites. The oldest one of these, AISSat-1 was declared non operative after 12 years of service. Operations are conducted at Skøyen in Oslo and uses the ground station belonging to its primary customer, the Norwegian Coastal Administration in Vardø, and the ground station at Svalbard. In 2022, the Norwegian



Coastal Administration received 2,2 billion AIS messages from Statsat. This is an important part of the Coastal Administration's surveillance of ship traffic along the Norwegian coastal region and the North Atlantic region.

The antenna ground system at Svalbard is owned by KSAT and functions mainly as a backup for the Vardø system.

The Statsat satellites are operated by Statsat's cost efficient inhouse developed software systems. The monitoring system identifies and performs automatic repairs of recognisable errors as well as controls and performs automated download and processing of data from satellite to ground station. The satellites are small (mass is between 10 and 20 kilos) and are therefore considered to be micro-satellites. The Statsat operated satellites are all in polar orbits between 525 and 625 kilometres' altitude.

In 2022, Statsat managed to keep its sales at the same level as the previous year, and their financial results changed from negative to positive. The Norwegian Space Centre wants Statsat to focus on developing skills and capabilities in Space Situational Awareness (SSA). This is a long-term task, and it seems likely that Statsat's income will continue at the same level as in 2022 in the future.

#### Statsat AS

Revenues EBITDA Operating profit Net income Number of employees, year end

2022	2021
11 128	10 087
53	-244
34	-263
5	-196
2,5	3

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	Managem
50	Digitisatic
55	Sustainab
63	The Board





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d of Directors of Space Norway

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### Organisation

The Space Norway organisation is in a phase characterised by growth and development. The decision in 2019 to implement the ASBM programme was an important milestone and a key driver for growth and development of the organisation. Space Norway experienced an increased need for strengthening its resource base and additional hiring was required for project management, technical expertise, security, regulatory, financing, legal as well as general administrative functions. Efficient and safe operation of space infrastructure requires industry experience and cutting-edge expertise in what is a specialised niche. Space Norway places great emphasis on offering a positive work environment to attract and retain skilled personnel.

Increasing the percentage of women in the company is important. The company's policy is to strive for a gender balance when recruiting where applicant qualifications are otherwise equal. At the end of 2021, Space Norway and its 100% owned subsidiaries had a total of 48 employees. In the jointly controlled company KSAT, there were a total of 300 employees at the end of 2022. The sickness absence rate in Space Norway and its wholly-owned subsidiaries was low, at 2.34% in 2022. In KSAT, the sickness absence rate was 3.4%.



\*) The numbers represent Space Norway with its wholly-owned subsidiaries.

From left: Dag Stølan, Knut Myrvang, Gro Undrum, Josein Rønneberg, Hans-Christian Haugli, Ivar Spydevold and Kjell-Ove Orderud Skare. Torstein Losnedal not present Photo: Nina Holtan | ninaholtan.no

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### **Space Norway Executive Management**

In 2022, the board of directors and management continued to work on the group's strategy and made ongoing adjustments to the organization to promote goals and strategies, including efficient operations. In the first half of 2023, CEO Jostein Rønneberg will pass the baton to a new CEO and transition into an advisory role within the company.



**Jostein Rønneberg** Group CEO and CEO of Space Norway AS



Hans-Christian Haugli Director Innovation and Development



**Gro Undrum** Group CFO and director of administration



Dag H. Stølan CSO and Director Infrastructure



**Knut Myrvang** CFO Space Norway HEOSAT AS



**Torstein Losnedahl** Group Legal Counsel

Space Norway



### **Kjell-Ove Orderud Skare** Programme Director ASBM



Ivar Spydevold CEO Statsat AS

Photo: Nina Holtan | ninaholtan.no

# **Digitisation of shipping**

Space Norway plays a leading role in developing new satellite systems for communication with ships

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Automatic Identification System (AIS) er et automatisk system, innført av FNs sjøfartsorganisasjon IMO<sup>16</sup> for å øke sikkerheten for skip. AIS-enheter om bord på skip sender informasjon om skipets posisjon, kurs, hastighet og skipets identitet via VHF-radiosignaler. Alle skip over 300 bruttotonn er pålagt å bruke AIS. Systemet er primært et antikollisjonssystem som gir informasjon direkte til det enkelte skip om trafikk i nærheten, og varsler om det er fare for sammenstøt eller risiko for nær passering. Systemet brukes også til å gi et detaljert sanntidsbilde over skipstrafikken i et område, og brukes av blant andre Kystverket til trafikkovervåking. Rekkevidden til systemet er imidlertid begrenset til det som er over horisonten sett fra mottakeren. For en AIS-basestasjon på land betyr dette gjerne en maksimal rekkevidde på cirka 70-100 km. Områder langt unna kyststasjoner, eksempelvis arktiske havområder, er derfor utenfor rekkevidden til landbaserte AIS-basestasjoner. Dette er en utfordring for norske kyst-, fiskeri- og redningsmyndigheters mulighet til overvåking og suverenitetshevdelse i nordområdene.

In 2005, the Board of the Norwegian Space Agency invited Norwegian companies to propose satellite-based AIS-solutions, where a project proposal from the Norwegian Defence Research Establishment (FFI) for an AIS receiver in space won the competition. AISSat-1, Norway's first national surveillance satellite, was developed in a partnership between FFI, the Norwegian Coastal Administration, the Norwegian Space Agency and Kongsberg Seatex. The satellite was launched in 2010, proving that satellite reception of AIS signals using small and cost-effective micro-satellites was feasible. According to Arve Dimmen, director of maritime safety at the Norwegian Coastal Administration in 2010, it was like turning on the lights at sea - they could now "see" ships across vast ocean regions. With AISSat-1, Norway

became one of the first nations in the world to operationalise satellite-based reception of AIS signals. The Norwegian Coastal Administration currently owns five AIS satellites. Space Norway subsidiary Statsat is responsible for the operation of the satellites, and Kongsberg Seatex supplies the technology for signal reception.

The VHF Data Exchange System (VDES) is a system under development designed to contribute to e-navigation (digitisation of shipping). ITU<sup>17</sup> and IALA<sup>18</sup> have been the driving force behind this technology. VDES will be enable two-way, low-speed communications with ships around the world, including the Arctic region. VDES can be seen as next generation AIS and operates within the same frequency range. This concept allows for a single terminal onboard each ship to handle both AIS and VDES. The system specification for VDES<sup>19</sup> was adapted for satellite-based communications and completed by International Telecommunications Union (ITU) in 2021, as a result of an initiative by IALA and ESA in 2014. A major advantage is that there is no need for new antennas on board ships or on land as the system uses existing VHF antennas. By supplementing coverage from land-based stations with coverage from satellites, VDES will in the future provide a seamless, global system for low-speed communication to/from ships.

In 2015, Space Norway, in partnership with Kongsberg Seatex and FFI, won a contract for the development of a prototype VDES payload, which has been demonstrated on vessels in the Arctic oceans. The company has established a leading role internationally in specification, development and testing of the satellite-based VDES system.

<sup>19</sup> ITU-R M.2092-(1)

51 Digitisation of shipping

<sup>17</sup> The International Telecommunication Union (ITU) is the United Nations specialized agency

<sup>18</sup>IALA er International Association of Maritime Aids to Navigation and Lighthouse Authorities

<sup>&</sup>lt;sup>16</sup> IMO is International Maritime Organization for information and communication technologies

NorSat-1 and 2 in orbit over Noway. These are micro satellites weighing only 16 kg, measuring 20x20x40cm excluding solar panels and antennas. NorSat-2 is the world's first satellite carrying a VDES payload. Photo: Space Norway, T. Abrahamsen Communication via satellites requires access to suitable frequency bands, which is a limited natural resource. Allocation and coordination of frequencies is managed through the ITU, a UN organisation where member countries participate and influence how, and for what use, frequencies are allocated. Allocation and coordination of frequencies is a complex process where a number of different interests are taken into account.

Space Norway has made a significant effort in international bodies such as CEPT<sup>20</sup>, ITU and IALA in the preparatory work leading up to the allocation of frequencies and standardisation of the VDES system. Lars Løge from Space Norway acted as coordinator for Europe (CEPT) on the issue of frequency allocation for VDES both in preparation for and during the World Radiocommunications Conference in 2019 (WRC-19). Norway – through a partnership between Space Norway and the Norwegian Communications Authority - was instrumental in achieving frequency allocation for VDES at WRC-19. This would not have been possible without comprehensive efforts in the form of system development, measurements and testing of VDES signals on NorSat-2, supported by ESA, the Norwegian Space Agency, the Norwegian Coastal Administration and the Norwegian Maritime Authority.

Space Norway contributes in the specification, development and demonstration of VDES-based services. Here are some examples:

- Satellite-based retransmission of AIS messages for increased situational awareness and navigation in the Arctic
- Broadcasting of ice maps to ships

- ons at sea
- Safety Agency)
- Galileo integrity messages for better and safer positioning
- Precise time and position via VDES
- Real-time quality monitoring system

Space Norway has developed a ship antenna concept that will increase its capacity 5-10-fold. Together with the industry, Space Norway has won an ESA tender to industrialise this concept, partnering with antenna manufacturer Comrod and Kongsberg Seatex. Space Norway works closely with our partners at Kongsberg Seatex, EMSA and the Norwegian Coastal Administration, with support from the Norwegian Space Agency and ESA, in making VDES an operational capacity. Norway is a world leader in this area and the only nation that currently has an operational VDES satellite in orbit. Space Norway has additionally acquired an updated and more capable VDES payload from Kongsberg Seatex, which will be one of the payloads on the Norwegian Space Agency's satellite NorSat-TD, planned for launch in 2023. The industry collaboration has been close and productive, and Kongsberg Seatex is positioned as a leading international supplier of both ship equipment and satellite payloads for VDES. With the advantages of the VDES system, there is reason to expect that the system will become an important communication platform for global ship traffic and an important contribution to increased safety and digitisation of the shipping industry

Distribution of search patterns in connection with rescue operati-

Ship reporting, also in partnership with EMSA (European Maritime

Broadcasting of EGNOS correction data and next generation GPS and

#### 1 2 3 4

MS Polarsyssel during testing of VDES signals from NorSat-2 on the shores of Svalbard 2020. Photo: Governor of Svalbard

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# Sustainable value creation at Space Norway

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Sustainability is becoming increasingly important throughout society as well as for individual enterprises. In the state ownership report (Report to the Parliament 8, 2019-2020), the Norwegian Government set out its expectations of state-owned companies. The report sets high expectations for sustainability and responsible business operations in state-owned companies. The report also states that these initiatives should be tailored to the company's type of operations, uniqueness, risk and size. Space Norway is committed to sustainable and responsible development and the strive to fulfil the expectations set out in the report. In Space Norway, sustainability and responsible business operations are an ongoing process with the objective to continuously improve over time. It is also a recognition that the company's capacity for efforts on sustainability initiatives is closely related to healthy financial results.

In 2015, the UN adopted 17 main goals and 169 targets for sustainable global development<sup>21</sup>. The goals shall function as a common global guideline for countries, for the business community at large and for society in general. The goals bring awareness to areas in need of sustainability and improvement. They also constitute an excellent framework for individual businesses to prioritise areas in which they can make a difference. Space Norway considers all 17 goals to be important and has identified five prioritised goals with particular emphasis in its day to-day business operations.

The five prioritised UN Sustainable Development Goals at Space Norway are;

<sup>21</sup> THE 17 GOALS | Sustainable Development (un.org)



Goal 5, Gender equality. Space Norway regards increasing the percentage of women in the company as important. The company's policy is to strive for a gender balance when recruiting new employees where the qualifications of the applicants are otherwise equal.

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### B DECENT WORK AND ECONOMIC GROWTH



#### Goal 8, Decent work and economic growth.

Space Norway emphasises a good working environment characterised by respect, openness and job satisfaction. An internal regulation for ethics and anti-corruption has been prepared and is reviewed with all employees at least twice a year. A whistle-blowing procedure has also been prepared, which is discussed with all employees at least twice a year. Spring of 2020, a separate working environment committee consisting of four members was established. Furthermore, a tailored Supplier Code of Conduct document, which forms the basis for major procurement contracts, has been set up.

#### **9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



#### Goal 9, Industry, innovatio

Operation and development of robust and secure infrastructure represents the core of Space Norway's business. The fibre connection to Svalbard is a critical resource that supplies the community on the archipelago with modern ecom-services. It is also vital to KSAT's operations for the distribution of data from satellites in polar orbits that are downloaded via the ground station network on Svalbard. Such data are important to end users in provision of weather forecasting services, environmental monitoring and contributions to Europe's Galileo navigation system. Space Norway also contributes with development of critical infrastructure by establishing a new satellite-based broadband in the Arctic, and through innovation and development of a satellite-based system for digitisation of the shipping industry as well as satellite-based radar monitoring of oceans in the High North.

57 Sustainable value creation at Space Norway

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#### Goal 12, Responsible consumption and production.

Emphasis is placed on awareness and continuous improvement related to consumption in daily operations. The company's main activities have a limited impact on the external environment in the form of emissions and pollution. Space Norway encourages its employees in their daily work to use resources as efficiently as possible, limit their waste, use recycling schemes and reduce activity that generates greenhouse gas emissions. Furthermore, management assesses the consequences for climate and sustainability related to new projects and investment decisions. The capabilities offered by Space Norway's provides end-users the opportunity to use new environmentally friendly services, an example being satellite-based ocean monitoring enabling a potential reduction in the use of traditional airplanes and ships.



Space Norway Goal 14, Life below water. Reduced ice cap in the Arctic is resulting in increased ship traffic and other activities in these vulnerable areas. The rise in traffic increases the risk of accidents and pollution. The need for surveillance, communication and security in these waters is therefore increasing. Norway has a particular responsibility for facilitating safe and environmentally sustainable activity in Norwegian waters. The infrastructure that Space Norway develops and operates contributes to enhanced information, communication, and safety at sea. The infrastructure supports services like weather forecasting, distribution of updated ice maps, detection of pollution, monitoring of ship traffic etc. These services can reduce the risk of accidents and improve coordination and execution of search and rescue operations.

In 2022, Space Norway intensified its efforts in sustainability. The framework for this work has been the United Nations Sustainable Development Goals (SDGs). Space Norway has chosen to focus on a selection of these goals and has interpreted them in the company's context. It should be noted that Space Norway is a relatively small Norwegian company that primarily consists of office workplaces. In addition to the office spaces, the company also has a physical facility in the form of an optical sea cable. In the future, the company plans to own satellites in space, along with related activities in its value chain. This value chain produces goods and services that have implications for sustainability.

The UN Sustainable Development Goals primarily target states and companies engaged in manufacturing activities across multiple countries. Therefore, Space Norway's sustainability activities must be tailored to the nature of its business. Through a materiality analysis, we have identified the areas of sustainable development that are most significant for the company's operations and our key stakeholders.

In 2022, sustainability activities were conducted by a dedicated working group as well as the company's administration and management. Going forward, our ambition is to integrate sustainability into all aspects of the company's operations as a natural part of our activities.

Below are examples of the company's internal goals and how they are evaluated:



#### Goal 5, Gender equality.

- Fair wage leve
- Equal opportu
- Number of wo
- Salary statisti
- Employee per
- Job hierarchy

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men in leadership positions	
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8 DECENT WORK AND ECONOMIC GROWTH



#### Goal 8, Decent work and economic growth.

- Internal code of ethics and anti-corruption policy to be made known to employees.
- Incorporate our "Supplier code of conduct" in all major contracts.
- Offering internships, summer jobs, and master's thesis collaborations at Space Norway.
- Number of annual reviews at company meetings
- Percentage of contracts over 10 MNOK with signed SCC
- Number of internships, summer jobs, and master's theses per year

#### **9** INDUSTRY, INNOVATION AND INFRASTRUCTURE



#### Goal 9, Industry, innovation, and infrastructure.

- Space Norway aims to p as a more sustainable alt
- Promoting activities relation infrastructure in relevant

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romote space-based infrastructure	
ternative to existing solutions ted to sustainable space-based	
forums and publications.	





#### Goal 12, Responsible consumption and production.

- Establishing recycling of cardboard, glass and metal.
- A system for recycling has been introduced in all offices.



### Goal 14, Life below water.

- Developing future-oriente Things (IoT) applications,
  ping and monitoring marin
- Mentioning our activities in vant forums and publication

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#### The GHG Protocol (Greeenhouse Gas Protocol)

The GHG Protocol is an internationally recognized standard for measuring greenhouse gas emissions. The most common metric used is the measurement of CO2 emissions in metric tons. The GHG Protocol categorizes emissions into different scopes:

#### Scope 1:

Direct emissions from the company's operations or equipment (typically small contributions)

#### Scope 2:

Indirect emissions from purchased energy used by the company (including electricity and district heating)

#### Scope 3:

Other indirect emissions associated with the goods and services the company purchases:

- Upstream emissions: Emissions related to the supply chain, including the delivery of satellites, rockets, ground stations, submarine cables, and travel activities
- Downstream emissions: Emissions associated with the decommissioning of assets mentioned in the upstream category

For Space Norway, it is expected that Scope 3 emissions make the most significant contribution to greenhouse gas emissions. As a result, the company plans to increase its focus on emissions related to Scope 3 activities, particularly travel activities. However, it is necessary to engage in travel activities for the oversight of production and construction in approved satellite projects.

Space Norway anticipates that coming years, but the company

#### Greenhouse gas emissions (CO2-equivale

Scope 1

Scope 2

Scope 3

- Space Norway anticipates that travel activity will increase in the
- coming years, but the company aims to stabilize the levels thereafter.

| ents) | 2022 | 2021 |
|-------|------|------|
|       | 0    | 0    |
|       | 16,5 | 16   |
|       | 23   | 7    |

### Work with the Transparency Act

### Due diligence assessments

SPN (Space Norway) prioritizes conducting due diligence assessments in accordance with the OECD Guidelines for Multinational Enterprises. These assessments cover not only SPN's own operations but also the activities it contributes to or is associated with through suppliers and subcontractors.

SPN has performed an assessment tailored to its existing business, considering the factors of significance and risk. The severity and probability of negative consequences for fundamental human rights and decent working conditions are particularly emphasized in the assessment.

It is important to note that SPN emphasizes the need for regular due diligence assessments, as circumstances can change over time. These assessments encompass not only SPN's own operations but also the activities of its subsidiary companies. + + + + + + Space Norway

### ↑ Photo: Subcom

#### Suppliers

Space Norway (SPN) has mapped its suppliers based on their country of origin and the size of business conducted with each company. As the parent company, SPN primarily works with Norwegian suppliers. However, there is one significant foreign supplier associated with the MicroSAR program.

Statsat, on the other hand, relies on Norwegian suppliers.

HEOSAT has significant foreign suppliers.

While all Norwegian suppliers are subject to the same laws and regulations as SPN, this report specifically focuses on the foreign suppliers and their commitment to human rights and decent working conditions.

In general, the emphasis is on the fact that the foreign suppliers and partners are predominantly large international companies. The three largest companies have been particularly examined based on the information provided on their websites.

SPN has also conducted a similar review and classification of the group's customers. As the parent company, SPN primarily serves domestic customers who are subject to the same laws and regulations as SPN itself. There are only a few foreign customers in the portfolio.

Statsat has a few small foreign customers.

HEOSAT has one large foreign customer.

SPN plans to conduct comprehensive surveys among its foreign partners in the spring of 2023. Subsequently, surveys will be sent to major Norwegian business contacts. The findings from these surveys will be presented in next year's report.

The current report is based on the categorization of business partners and customers mentioned earlier, as well as the information provided on their websites regarding their practices in this area. Most of SPN's customers and suppliers are Norwegian and are thus subject to the same laws and regulations as SPN. Based on an assessment of materiality, it is assumed that these partners are monitored by Norwegian authorities and take human rights and decent working conditions seriously. It is worth noting that the majority of Norwegian customers and partners are public authorities.

Regarding foreign partners and customers, their nationality implies that they are subject to similar rules concerning human rights and decent working conditions. It is assumed that there are strict controls in place to ensure compliance with these regulations in their respective countries. In this regard, SPN has found it proportional to examine the policies stated by the largest partners. These partners are large international companies, and based on the information provided on their websites, it can be concluded that they prioritize and take human rights and decent working conditions seriously.

SPN believes that this assessment provides a satisfactory understanding of materiality for 2022. However, the company will continue to work on surveys and further assessments throughout the year in preparation for next year's due diligence report.

## **Space Norway's Board of Directors**



### **Svein Olav** Munkeby

Chairman of the Board born 1967



Μ b

#### Master of Management (NTNU) / Global Management (INSEAD)

Munkeby has extensive management experience from IT, telecom and energy sectors such as NTE, Statkraft, Telenor, Bravida and the Glen Dimplex Group. Today Munkeby is the Executive Vice President of NTE and Managing Director of NTE Market. He is also Chairman of the Board for the K-Lund Group, and holds board positions in NTE Telecom, NTE Electro, Hark Technologies, Sensortech and Renewable Energy Cluster. He has previously been member of the board and leader of the innovation committee for the Research Centre on Zero Emission Neighbourhoods in Smart Cities (FME ZEN) and for the Norwegian venture investment fund ProVenture. Munkeby has a Master of Management degree from NTNU with a specialization within strategy, business development and innovation management, as well as a education from INSEAD. Additionally he holds an engineering- and economics degree from NTNU.

#### **Master of Business Adminis** financial analyst, Norwegia

**Rimmereid** is currently project previously been CEO of E-CC E-CO and Director of Admini has also held leading positio CFO of SpareBank1 Grupper sen (now part of Nordea). Ri chairman of the board of DN currently also holds a number

### **Tore Olaf** Rimmereid

| lember of the Board<br>orn 1962  |  |
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| stration and certified<br>In School of Managemet   |  |
| ct director at Hafslund Eco. He has<br>D Energi, Deputy CEO of Hafslund<br>istration and Finance at NRK. He<br>ons in banking and finance, including<br>n and bank manager at Kreditkas-<br>mmereid was a member/deputy<br>IB from 2007 to 2020. Rimmereid<br>er of other board positions. |  |

Space Norway

Photo: Nina Holtan | ninaholtan.no

## **Space Norway's Board of Directors**



### **Ann-Kari** Heier

Member of the Board born 1966



Ν

MSc, Norwegian University **Electronics and Telecommu** 

Løvlund arbeider som CEO datterselskap av Telenor No erfaring innen satellitt- og te fartstid i Telenor og har jobb prosjekter på tvers av Teleno og innovasjon. Hun var også før hun gikk tilbake til Teleno AS. Løvlund har tidligere vær

#### MSc, Norwegian University of Science and Technology, **Technical Cybernetics**

Heier works as COO at Telenor Maritime AS. She has more than 30 years' experience from industry and international research institutions such as CERN and ESA. She has hands-on experience of development work on and management of technically and commercially demanding projects. For the past 15 years, Ann-Kari has held various executive management roles in the supplier industry for the maritime and offshore industries. Heier is also a board member of NHO Agder and Maritimt Forum Sør.

### Siri Løvlund

| of Science and Technology,<br>Inication   |  |
|---|--|
| i Nordix Data AS som er et heleid<br>orge AS. Hun har mer enn 15 års<br>elekom industrien. Hun har lang<br>oet med store internasjonale<br>or konsernet, både innen teknologi<br>å en periode COO i Norsk Helsenett<br>orsystemet som CEO for Nordix Data<br>rt styremedlem i Telenor Svalbard AS |  |

Photo: Nina Holtan | ninaholtan.no

Space Norway

## **Space Norway's Board of Directors**



### **Morten Haga** Lunde

Member of the Board born 1960

#### Lieutenant General (P)

Haga Lunde has since August 2021 worked with the Norwegian Shipowners' Association, with the Contingency Planning division, as a special councel. Lunde was from January 2016 until November 2020 Head of the Norwegian Intelligence Service. He has also been Head of the Norwegian Joint Headguarters, the operational command-center of the Norwegian Armed Forces, in Bodø from 2013 until 2016. Lunde has 41 years' service from the Air Force and Norwegian Armed Forces, including division manager of operations and contingency planning with the Ministry of Defence. Lunde has flight operational background from the P-3 Orion surveillance plane, C-130 Herkules and Sea King rescue helicopter.

### MSc, Norwegian University of Science and Technology

Våland is a specialist in Radar and electronic warfare and has been a major contributor to the development of several different radar systems. He is very experienced in working on complex projects both nationally and internationally. For over 30 years, Våland has held leading positions within technical development and business development as well as general management. Today he holds the position of systems manager for the MicroSAR programme. Våland is a MSc from the Norwegian University of Science and Technology.



### Member of the Board born 1964

Photo: Nina Holtan | ninaholtan.no

Space Norway

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# Group structure and share holdings fino 2022 +

Space Norway Group consists of the holding company + and three subsidiaries. The share capital of the holding company consists of 2,600,000 shares, each with a nominal value of NOK 19. Space Norway AS is 100% owned + by the Ministry of Trade, Industry, and Fisheries.

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### **Board of directors' report 2022**

The group consists of the parent company Space Norway AS and its wholly-owned subsidiaries Statsat AS and Space Norway HEOSAT AS (HEOSAT), as well as a 50% ownership stake in the jointly controlled company Kongsberg Satellite Services AS (KSAT). KSAT is consolidated into the group using the gross profit method.



#### ↑ Photo: Nina Holtan ninaholtan.no

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The parent company, Space Norway AS, is 100% owned by the Ministry of Trade, Industry and Fisheries. The company is a sector-specific entity that aims to develop and operate space-related infrastructure to meet national user needs and contribute to value creation based on space activities in Norway. The company identifies and develops new opportunities and projects with a long-term perspective, collaborating with other national communication and space entities. The focus is on the Arctic region as the central geographic area of interest. The company does not receive grants from the state budget and operates on a commercial basis.

#### **Business area and Market**

Space Norway AS owns and is responsible for the fiber optic connection between mainland Norway and Svalbard. In addition to transmitting satellite data to customers worldwide, the fiber system serves as the primary link between Svalbard and the outside world. The Svalbard Fiber was put into operation in January 2004. This fiber connection has triggered significant space-related economic development and provided valuable societal benefits for the Svalbard community.

In 2022, Space Norway also implemented measures to enhance the resilience of the Svalbard Fiber. In this regard, the company maintained close communication with relevant Norwegian authorities. The company generates revenue through wholesale sales of transmission capacity to long-term customers.

Following the rupture in Segment 1 west of Svalbard on January 7, 2022, a temporary repair was carried out by establishing a

power source in Longyearbyen. Efforts have been made to secure a cable-laying vessel for the final repair. Weather and ice conditions need to be taken into consideration, and the repair is scheduled to be completed in the first half of 2023.

In 2011, Space Norway entered into an agreement with Telenor Satellite Broadcasting to lease capacity on one of the transponders of the Thor 7 satellite. The transponder and an antenna were designed at the company's initiative to address the need for cost-effective data transmission from the Troll Station in Antarctica to Norway. The satellite was launched in 2015 and has an approximate lifespan of 15 years. The capacity is sub-leased to KSAT.

The subsidiary Statsat AS is responsible for the operation and development of small satellites for government purposes. The activities are primarily related to the operation and renewal of the Coastal Administration's fleet of AIS satellites. The assignment is reviewed annually, but long-term plans for maintenance and continued operations have been established

The subsidiary HEOSAT was registered in 2019 and is a project company established for providing broadband services in the Arctic through two satellites in a highly elliptical orbit along with corresponding ground segments. The entire capacity has been pre-sold to the Norwegian Armed Forces, the US Space Force, and Inmarsat. The program is fully financed through a combination of prepayments, bank loans, and equity. The satellites are currently being built by Northrop Grumman in the USA and are expected to be launched in 2024. During the period leading up to the launch, the group will incur significant costs related to the development and construction of the satellites. The order backlog for HEOSAT is USD 624 million, (samme som året før?) and the estimated annual income once the satellites are operational is USD 41.7 million.

KSAT is a jointly controlled entity owned 50/50 by Space Norway AS and Kongsberg Defence & Aerospace AS. KSAT is the world's largest provider of services for satellite control and data reception from satellites in polar orbits. At the end of 2022, KSAT operated approximately 300 antennas and conducted around 1,040,000 satellite contacts throughout the year.

KSAT provides services to programs like Galileo and Copernicus, which are important ESA/EU-funded initiatives. KSAT has demonstrated consistent growth and results over time. The turnover in 2022 amounted to 1,471 billion NOK (2021: 1.232 billion). In 2022, 81% of the turnover came from customers outside of Norway. The order intake (backlog) in 2022 was 2,2 billion NOK. The operating profit before depreciation and amortisation (EBITDA) was 561 million NOK (2021: 475 million NOK). The positive development can be attributed to a strong and unique infrastructure (pole-to-pole coverage with stations both in Svalbard and at the Troll Station in Antarctica), increasing demand for satellite services, and an efficient organization.

#### **Goals and Key Performance Indicators**

In line with the group's strategy, we have established measurement parameters to better monitor key operational and developmental aspects:



| al goal achievements |            |              |  |  |  |  |
|----------------------|------------|--------------|--|--|--|--|
|                      | Goals 2022 | Results 2022 |  |  |  |  |
| in<br>g              | Exceed 5%  | 20%          |  |  |  |  |
|                      | >98%       | 98,80%       |  |  |  |  |
| e                    | >99,995%   | 100%         |  |  |  |  |
|                      | >6%        | 10,10%       |  |  |  |  |
| ity                  | 100%       | 100%         |  |  |  |  |
| Efficient operations                            |   |                        |               |  |  |  |
|---|---|------------------------|---------------|--|--|--|
| Longterm goal Indicators Goal 2022 Results 2022 |   |                        |               |  |  |  |
| Satisfactory<br>development<br>in cost          | Operational cost<br>(ex depriciaton)<br>in percent of<br>activated value of<br>operational assets | Lavere enn<br>året før | 6,87% (7,02%) |  |  |  |

# Summary of income statement and financial position

The group's turnover in 2022 was NOK 886 million, an increase from NOK 654.4 million in 2021. This growth is mainly due to revenue growth in KSAT. The group's operating profit (EBIT) was NOK 131 million compared to NOK 73,4 million the previous year.

Net financial items represent NOK –32,9 million on a group basis, compared to NOK 27,7 million in 2021. The main reason is a currency effect. The payment is in USD to match investments in USD, but as the group accounts are in NOK, currency fluctuations will affect the group's net financial items.

Pre-tax profits (EBT) were NOK 98,2 million in 2022, an increase from NOK 45,8 million in 2021. Tax is expensed at NOK 32,7 million. The group's net profits after tax were NOK 65,5 million, an increase from NOK 16,5 million in 2021.

At the end of 2022, total assets in the group amounted to NOK 4,8 billion, an increase from NOK 4,3 billion at the end of 2021. Capitalized investment costs in HEOSAT related to the construction of the company's two satellites is the primary contributor to this increase. Construction work in progress represented NOK 2,8 billion at the end of 2022, an increase from NOK 2,4 billion in 2021. The joint venture, KSAT, represented NOK 1,191 million of the consolidated total assets at the end of 2022. The group's current assets represented NOK 1,122 million by the end of 2022, an increase from NOK 998 million in 2021.

Total equity at the end of 2022 was NOK 1,376 million, which is an increase from NOK 1,309 million at the end of 2021. The equity ratio at the end of 2022 was 28,4%, down from 30% in 2021. The group's long-term debt as of 31 December 2022 was NOK 3,1 billion, of which NOK 3 billion is related to the HEOSAT subsidiary. Long-term debt in HEOSAT at the end of 2022 consisted of bank loans (NOK 521 million) and pre-payments from customers (NOK 2,534 million). Short-term debt at the end of 2022 was NOK 378 million, an increase from NOK 336 million at the end of 2021.

Net cash flow from operational activities was NOK 76,2 million in 2022 compared to NOK 84,9 million in 2021. Cash flow from investment activities was NOK 0,612 billion in 2022 compared to NOK 0,858 billion in 2021. Lower payments related to the construction of the HEOSAT satellites constituted most of this difference. Cash flow from financing activities was NOK 0,445 billion in 2022. The net change in the cash position for the group was NOK 91 million in 2022 and the cash position at the end of 2022 was NOK 657 million.

The investment programme ASBM, in the HEOSAT subsidiary, will also represents significant cash expenditures in 2023. There is no basis for dividends from the parent company during this investment phase. A large part of the group's cash and cash equivalents relates to committed future payments of contracts in HEOSAT. The Board of Directors (BoD) considers the liquidity to be satisfactory.

# Space Norway AS is the parent company of the group

The parent company's net profits after tax in 2022 was NOK 6,5 million. The BoD proposes to retain the entire net profit for other equity. Subsequently, the total equity for the parent company will amount to NOK 663 million, corresponding to an equity ratio of 68,7%. Pursuant to Section 3-3 of the Norwegian Accounting Act, it is confirmed that the assumption of continued operations forms the basis of the presented financial statements. Considering the stage the company is in, the BoD finds the results to be satisfactory. The BoD is of the opinion that the annual accounts provide a true picture of the company's and the group's assets and liabilities, financial position and profits at the end of the year.

# Tax policy

The company and its wholly-owned subsidiaries conduct all their operations in Norway and operate in accordance with Norwegian tax legislation and regulations. In connection with the implementation of the ASBM program, Space Norway HEOSAT AS will have limited activity in the USA. KSAT has activities in multiple locations around the world. The main activity is subject to Norwegian tax laws, while activities in other parts of the world adhere to local tax legislation.

# Innovation and development

An important part of the group's mandate is the further development of security-critical space-related infrastructure. Continuous efforts are made to identify, assess, and develop new projects that are relevant to Norwegian user needs.

The group's activities in the development of broadband capacity in the Arctic were transferred to the subsidiary HEOSAT in 2019. The satellites will be operational from the first half of 2024. Other development activities include a project to develop and demonstrate maritime surveillance services with advanced radar technology. This is performed in close collaboration with Norwegian government bodies. Furthermore, there are collaboration projects with the European Space Agency (ESA) and Norwegian technology companies on the development and testing of satellite-based solutions for maritime surveillance, maritime safety and emergency preparedness. These activities contribute to further building expertise both within the company and with our partners

# Employees

In line with the BoD plans, Space Norway AS has in 2022 continued the development of the organisation and attracted additional expertise to ensure completion of existing commitments and for developing new space-related infrastructure projects.

At the end of 2022, Space Norway AS and its 100% owned subsidiaries had 48 employees and KSAT had 360 employees. The proportion of women in KSAT was 28% and 14,6% in the parent company inclu-

ding its 100% owned subsidiaries. The parent company's management team consists of two men and one woman. Sickness absence in 2022 was 3,4% for KSAT and 2,34 % for the other companies.

Other staff resources are contracted on a consultancy basis. Salary levels at Space Norway AS are not market leading, but competitive. The company seeks to meet the requirement for gender equality for new recruitments.

## **Risk management and internal controls**

The group focuses on controlling risk in activities and projects, and no new projects or activities are initiated without a risk assessment, in particular the financial risks. Internal controls have been established in routines and processes where the division of labour and clear responsibilities and authority are key.

The basis for an effective and systematic risk management process is a good understanding of the risk factors affecting the group. The BoD and the administration prioritise to continuously update a comprehensive overview of applicable risk factors. Some of the most important risk factors for the group and the industry are discussed below.

### Market risk

The market for the services provided by the group is characterised by long and relatively stable contracts. All capacity on the ASBM programme has been pre-sold to reliable customers. At the end of 2022, the order backlog in HEOSAT represented USD 624 million. The ASBM programme is expected to be operational from the first half of 2024 onwards. At the end of 2022, the joint venture KSAT, had a satisfactory order backlog.

## **Operational disruptions**

The group has delivery obligations to its customers, and any operational disruptions can lead to losses and additional costs related to repairs. For the fiber connection to Svalbard, the group has a commitment to restore the connection in case of any failure. In this regard, a guarantee consortium has been established with key users, regulating their financial contributions related to potential repairs during interruptions. In 2023, an emergency agreement has been signed with Alcatel/ APMA. The ASBM program is scheduled to become operational in the first half of 2024. There are risks associated with aspects like launch, performance, or project delays. Insurance has been taken out to cover the launch and the first year in orbit.

### The COVID-19 pandemic

The COVID-19 pandemic continued into 2022 and has to some extent affected work processes internally in the group as well as with sub-contractors and customers. The effects experienced by the group have been limited with no significant disruptions or sickness absence in its operations. The pandemic has so far led to delays in the progress of the group's projects, especially for the ASBM programme.

### **Project risk**

The group focuses on assessing and controlling risk in its activities and projects. The ASBM programme is the group's largest project and represents risks related to financial, technical and operational matters, as well as progress. Regular financial, technical and legal audits are performed under the auspices of the Norwegian Ministry of Trade, Industry and Fisheries using external advisors. As of the turn of the year 2022/2023, there is a 12-month delay in the ASBM program, partly due to the lingering effects of Covid.

## IT security, data breaches and sabotage

Threats to IT systems are a growing challenge for both businesses and the public sector. The operational capability of the group is highly dependent on the uninterrupted operation of various IT systems. Any disruptions resulting from accidents, errors, sabotage, or deliberate hacking of systems can lead to operational interruptions, loss of information, reputation damage, and significant negative financial consequences. The group's activities within technology and critical infrastructure security entail a particular focus on this area. Our IT provider, Intility, along with our security consultants from Mnemonic, have a strong focus on security, and regular checks are conducted to mitigate risks.

# Anti-corruption and whistleblowing

The group has zero tolerance for corruption and has established rules and guidelines for ethics and anti-corruption. The rules are reviewed with employees at least twice a year, and a separate whistle-blowing procedure has been established. However, such routines and practices are not a guarantee that individuals in the group will at all times follow the requirements and guidelines incumbent on the group. If individuals violate laws, ethical requirements and other rules, this may still lead to losses and liability for the group.

### Currency risk

The business is exposed to changes in exchange rates, primarily the exchange rates of the Norwegian krone to the US dollar (USD) and the euro (EUR). The group's policy is to currency hedge significant contracts. Income and costs/investments on the ASBM programme are mainly based in USD, with the exception of contracts for the con-

struction and operation of the ground segment in Norway which are in NOK. Investments in USD are currency hedged during the construction period. Currency hedging has not yet been established for the operating phase. Advance payments received from customers in the ASBM programme are in USD. Our accounts are prepared in NOK, and the exchange rate between NOK/USD will have an accounting currency effect. ESA projects (EUR) and future operating income related to the ASBM programme (USD) are not currency hedged. The joint venture KSAT receives a large part of its income in USD and EUR and is therefore exposed to currency risk. KSAT safeguards its contractual income streams through futures contracts.

#### Interest rate risk

With the exception of the HEOSAT subsidiary, the group has little interest-bearing debt. The HEOSAT subsidiary has established a loan facility of up to USD 100 million, which is utilized in line with investments in the programme. As per end of 2022, the loan facility has been drawn upon in part. Of this facility, 75% is secured at a fixed interest rate and 25% at a floating interest rate. The company also has a shortterm credit facility of USD 10 million.

The joint venture KSAT has a net positive cash position.

## Liquidity risk

Space Norway is the parent company in the group. A significant part of the group's profits and cash flow are created in subsidiaries and joint ventures. The parent company's liquidity supply is therefore based on income in the parent company as well as group contributions or dividends from subsidiaries in the group. In 2019, the Norwegian Government decided to provide up to USD 101 million in paid-in equity in connection with the ASBM programme. This capital will be provided over several years. The ASBM programme is fully financed by a combination of equity, bank loans and advance payments from customers.

# **Credit risk**

The group's customers represent a mixture of public and large private business groups, and losses on receivables have historically been low.

# **Resource risk**

Konsernet har god kompetanse, men knapt med ressurser slik at vi til The group possesses strong expertise, but resources are scarce, making it necessary to use resources across the organization where they are most needed. There is a high workload that has persisted for a long time. In case of illness or if key personnel were to leave the group, vulnerabilities arise. To some extent, this is compensated for by hiring external resources.

# Health, safety and environment

Space Norway aims to be an attractive workplace with a diverse and inclusive working environment characterised by honesty, respect, courage, openness and interaction. The company wishes to strengthen diversity, including recruiting more women to achieve a better gender balance.

The group is located in modern and functional premises at Skøyen in Oslo and a good working environment has been established. There have been no injuries or accidents. The group's activities have limited impact on the external environment in terms of pollution. We are committed to keeping this impact at a low level.

In connection with the ASBM program, two satellites are scheduled to be launched. In this context, a comprehensive analysis was conducted in the fall of 2021 regarding end-of-life handling. The two ASBM satellites are set to be launched in the first half of 2024 and are expected to have a lifespan of 15 years. After their operational life, we have reserved fuel for a final maneuver to place the satellites in a so-called graveyard orbit, where they will remain for at least 100 years. The previous plan to place the satellites in a lower orbit, where they would re-enter the atmosphere after a few years to burn up, carries a significant risk of uncontrolled debris falling to Earth.

The company has chosen to use SpaceX for the launch of the satellites. SpaceX utilizes rockets that are reusable and thus environmentally friendly. Our development of VDES-services in particular, but also other satellite-based services under development at Space Norway, will contribute to more efficient search and rescue actions as well as provide more efficient routing and navigation for ships.

The company has established guidelines and routines to prevent corruption and other ethically adverse events.

In 2022, the company did not have any cases or warnings related to corruption or other ethical matters.

The group did not experience any accidents in 2022. Work during the first months of the year was largely conducted from home offices in accordance with government recommendations. The sick leave rate for 2022 is 2.34%. Throughout 2022, three meetings of the work environment committee were held, surpassing the minimum requirement of two meetings per year. Regular meetings between management and the employee interest organization (Tekna) are also conducted. The management is supportive of employees being members of professional organizations.

# The Board of Directors

At the end of the year, the board consists of six members. In the spring of 2022, the employee representative on the board concluded their employment with us, and the alternate representative was promoted to a full board member. The employees have elected a new alternate for the employee representative. Eight board meetings have been conducted. The board's work is based on an approved board instruction. The most significant matters decided by the board include the company's strategy, goal and performance management, budget and accounting with subsequent budget control, significant investment matters, and development projects, as well as authorizations for the administration. Other matters reviewed by the board primarily include status reports on significant areas and risk assessments. The board follows the Norwegian Code of Practice for Corporate Governance. Board members are elected for two-year terms.

In 2021, the company continued the process of defining business objectives and key performance indicators. Similarly, work is being conducted on sustainability-related topics and assessments in accordance with transparency regulations. More detailed explanations can be found on the company's website: www.spacenorway.no The company's website also contains statements on gender equality and guidelines for executive compensation.

Rules of procedures have been established for the BoD and the CEO with emphasis on a clear division of responsibilities and tasks. The BoD reviews its work and expertise annually. The company has taken out liability insurance for the members of the BoD and upper management, for NOK 50 million, for the mother company as well as the two 100% owned subsidiaries. The insurance is valid worldwide.

# **Financial prospects**

Based on the comments provided above, the company's and group's market, credit, and financial risks are considered moderate. The board believes that the company and group are well-positioned for the future. 2022 was a satisfactory year for the company and group. With the ongoing projects, a weaker financial year is anticipated in 2023.

Incidents after balance sheet date No significant incidents have ocurred after balance sheet date

# Styret i Space Norway

Skøyen, 24.05.2023



Svein Olav Munkeby Chairman of the Board



**Tore Olaf Rimmereid** Board Members



Ann-Kari Heier Board Members



Morten Haga Lunde Board Members



**Siri Løvlund** Board Members



**Per Atle Våland** Board Members



Jostein Rønneberg CEO Space Norway

Photo: Nina Holtan | ninaholtan.no

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# Group and company accounts including financial notes

The Group comprises the holding company Space Norway AS including the 100% owned subsidiaries Statsat AS and Space Norway HEOSAT AS, as well as a 50% ownership in Kongsberg Satellite Services (KSAT). KSAT has been consolidated into the group accounts based on the gross profit method



# **Income statement**

|   | Space Norway AS |             |             |
|---|-----------------|-------------|-------------|
| Operating income and expenses             | Note            | 2022        | 2021        |
| Operating income                          | 1,2,3           | 0           | 0           |
| Income from communication services        | 1,2             | 27 580 522  | 27 779 654  |
| Other operating income                    | 1,2             | 91 724 780  | 72 844 989  |
| Total operating income                    |                 | 119 305 302 | 100 624 643 |
| Material cost                             |                 | 9 852 422   | 9 885 015   |
| Personnel expenses                        | 4               | 43 617 148  | 38 151 674  |
| Depreciation                              | 7               | 13 374 902  | 13 370 413  |
| Cost related to communication services    |                 | 7 188 031   | 6 378 058   |
| Other operating expenses                  | 4, 10           | 94 771 849  | 70 657 816  |
| Total operating expenses                  |                 | 168 804 351 | 138 442 975 |
| Operating profit                          |                 | -49 499 049 | -37 818 332 |
| Financial income and expenses             |                 |             |             |
| Income from investment in other companies | 8               | 65,000,000  | 62 500 000  |
| Other interest income                     | 0               | 1 103 213   | 34 508      |
| Other financial income                    | 5               | 6 301 216   | 43 690 569  |
| Other interest expences                   | 5 1 2           | 6 838 023   | 7 619 824   |
| Other financial expences                  | 5 12            | 9 611 726   | 39 012 519  |
| Net financial items                       | 0,12            | 55 954 681  | 59 592 734  |
|   |                 |             |             |
| Ordinary result before taxes              |                 | 6 455 632   | 21 774 402  |
| Taxes                                     | 6               | 0           | 0           |
| Net income                                |                 | 6 455 632   | 21 774 402  |
| Allocations                               |                 |             |             |
| Transfered to retained earnings           | 11              | 6 455 632   | 21 774 402  |
| Total allocations                         |                 | 6 455 632   | 21 774 402  |

| Operating    | income and expenses             |
|--------------|---------------------------------|
| Operating i  | ncome                           |
| Income from  | n communication services        |
| Other oper   | ating income                    |
| Total opera  | iting income                    |
| Material co  | st                              |
| Personnel e  | expenses                        |
| Depreciatio  | 'n                              |
| Cost related | d to communication services     |
| Other oper   | ating expenses                  |
| Total operc  | iting expenses                  |
| Operating    | profit                          |
| Financial ir | ncome and expenses              |
| Income fror  | n investment in other companies |
| Other intere | est income                      |
| Other finan  | cial income                     |
| Other intere | est expences                    |
| Other finan  | cial expences                   |
| Net financi  | al items                        |
| Ordinary re  | esult before taxes              |
| Taxes        |                                 |
| Net income   | 2                               |
| Allocations  | 3                               |
| Transfered   | to retained earnings            |
| Total alloca | ations                          |

| Space | Norway | Group |
|-------|--------|-------|
|-------|--------|-------|

|       | -           |             |
|-------|-------------|-------------|
| Note  | 2022        | 2021        |
| 1,2,3 | 798 350 893 | 594 492 836 |
| 1,2   | 20 201 283  | 24 662 255  |
| 1,2   | 67 347 755  | 34 933 356  |
|       | 885 899 931 | 654 088 447 |
|       | 187 916 240 | 133 490 306 |
| 4     | 235 231 374 | 181 328 632 |
| 7     | 102 859 424 | 82 192 180  |
|       | 8 378 335   | 7 617 126   |
| 4, 10 | 220 456 068 | 176 004 305 |
|       | 754 841 441 | 580 632 549 |
|       | 131 058 490 | 73 455 899  |
|       |             |             |
|       |             |             |
| s 8   | 0           | 0           |
|       | 6 516 569   | 145 880     |
| 5     | 24 481 216  | 41 797 768  |
| 5,12  | 32 822 831  | 16 213 162  |
| 5,12  | 31 029 001  | 53 387 758  |
|       | -32 854 047 | -27 657 272 |
|       | 98 204 443  | 45 798 627  |
| 6     | 32 662 007  | 29 300 221  |
| 0     | 65 542 436  | 16 498 407  |
|       | 05 542 430  | 10 430 407  |
|       |             |             |
| 11    | 65 542 436  | 16 498 407  |
|       | 65 542 436  | 16 498 407  |

| Space Norway  |      |             |               |
|---|------|-------------|---------------|
| Assets  | Note | 31/12/2022  | 31/12/2021    |
| Fixed assets  |      |             |               |
| Intangible assets                                   |      |             |               |
| Deferred tax assets                                 | 6    | 0           | 0             |
| Total intangible assets                             |      | 0           | 0             |
| Tangible assets                                     |      |             |               |
| Operating movable property, furniture, tools, other | 7    | 140 382     | 2 427 367     |
| Buildings and other real estate                     | 7    | 2 794 728   | 1 467 040     |
| Machinery and equipment                             | 7    | 73 685 980  | 85 966 984    |
| Assets under construction                           | 7    | 60 872 765  |               |
| Total tangible assets                               |      | 137 493 854 | 89 861 391    |
| Fixed financial assets                              |      |             |               |
| Investments in group companies                      | 8    | 476 203 824 | 476 203 824   |
| Deposit   | 14   | 22 421 368  | 19 011 082    |
| Other long-term recievables                         | 13   | 0           |               |
| Total fixed financial assets                        |      | 498 625 192 | 495 214 906   |
| Total fixed assets                                  |      | 636 119 046 | 585 076 297   |
| Current assets                                      |      |             |               |
| Debitors  |      |             |               |
| Accounts recievables                                |      | 10 281 795  | 14 982 772    |
| Other short term recievables                        |      | 164 919 682 | 71 990 343    |
| Total recievables                                   |      | 175 201 477 | 86 973 115    |
| Cash and deposits                                   | 9    | 154 039 216 | 542 282 046   |
| Total current assets                                |      | 329 240 693 | 629 255 160   |
| Total assets  |      | 965 359 739 | 1 214 331 457 |

# Statement of financial position

| Assets                                      |
|---|
| Fixed assets                                |
| Intangible assets                           |
| Deferred tax assets                         |
| Total intangible assets                     |
| Tangible assets                             |
| Operating movable property, furniture, tool |
| Buildings and other real estate             |
| Machinery and equipment                     |
| Assets under construction                   |
| Total tangible assets                       |
| Fixed financial assets                      |
| Investments in group companies              |
| Deposit                                     |
| Other long-term recievables                 |
| Total fixed financial assets                |
| Total fixed assets                          |
| Current assets                              |
| Debitors                                    |
| Accounts recievables                        |
| Other short term recievables                |
| Total recievables                           |
| Cach and donasite                           |
|   |
|   |
|   |
|   |

|              | Space Norway Group |                    |  |  |
|--------------|--------------------|--------------------|--|--|
| Note         | 31/12/2022         | 31/12/2021         |  |  |
|              |                    |                    |  |  |
|              |                    |                    |  |  |
| 6            | 20 560 684         | 15 512 691         |  |  |
|              | 20 560 684         | 15 512 691         |  |  |
|              |                    |                    |  |  |
| ools other 7 | 26 188 224         | <i>/</i> 1 105 070 |  |  |
| 7            | 162 527 700        | 149 041 540        |  |  |
| 7            | 103 527 700        | 146 941 540        |  |  |
| /            | 618 871 480        | 5/5 555 484        |  |  |
| /            | 2 /95 633 906      | 2 432 083 828      |  |  |
|              | 3 604 221 310      | 3 197 685 922      |  |  |
|              |                    |                    |  |  |
| 8            | 400 000            | 25 000             |  |  |
| 14           | 22 421 368         | 19 011 082         |  |  |
| 13           | 68 976 362         | 98 683 056         |  |  |
|              | 91 797 730         | 117 719 138        |  |  |
|              | 3 716 579 724      | 3 330 917 751      |  |  |
|              |                    |                    |  |  |
|              |                    |                    |  |  |
|              | 127 400 520        |                    |  |  |
|              | 137 480 529        | 64 358 583         |  |  |
|              | 327 695 263        | 185 523 746        |  |  |
|              | 465 175 792        | 249 882 329        |  |  |
| 9            | 656 894 545        | 747 883 286        |  |  |
|              | 1 122 070 337      | 997 765 615        |  |  |
|              | 4 838 650 060      | 4 328 683 366      |  |  |

# Statement of financial position continues

|                              |      | Space Norway AS |               |  |
|------------------------------|------|-----------------|---------------|--|
| Equity and liabilities       | Note | 31.12.2022      | 31.12.2021    |  |
| Paid-up equity               |      |                 |               |  |
| Share capital                |      | 49 400 000      | 18 200 000    |  |
| Unregisteres share capital   |      | 0               | 31 200 000    |  |
| Total paid-up equity         | 10   | 420 814 584     | 420 814 584   |  |
| Total contributed equity     |      | 470 214 584     | 470 214 584   |  |
| Retained earnings            |      |                 |               |  |
| Other equity                 | 10   | 193 292 641     | 186 837 009   |  |
| Total retained earnings      |      | 193 292 641     | 186 837 009   |  |
| Total equity                 | 10   | 663 507 225     | 657 051 593   |  |
| Liabilities                  |      |                 |               |  |
| Allowances for liabilities   |      |                 |               |  |
| Other long term liabilities  |      | 4 000 000       | 4 000 000     |  |
| Liabilities, ASBM            | 11   | 0               | 0             |  |
| Project prepayments          | 12   | 203 986 029     | 118 384 241   |  |
| Total long term liabilities  |      | 207 986 029     | 122 384 241   |  |
| Short term liabilities       |      |                 |               |  |
| Trade creditors              | 9    | 9 888 127       | 10 277 212    |  |
| Value added taxes            |      | 1 083 004       | 4 438 795     |  |
| Other current liabilities    | 9    | 82 895 355      | 107 001 216   |  |
| Debt to group companies      | 9    | -               | 313 178 400   |  |
| Tax payable                  |      | 0               | 0             |  |
| Total short term liabilities |      | 93 866 487      | 434 895 623   |  |
| Total liabilities            |      | 301 852 516     | 557 279 864   |  |
| Total equity and liabilities |      | 965 359 739     | 1 214 331 457 |  |
| Guarantees                   | 13   | 50 000 000      | 38 022 164    |  |

**Equity and liabilities** Paid-up equity Share capital Unregisteres share capital Total paid-up equity Total contributed equity **Retained earnings** Other equity **Total retained earnings Total equity** Liabilities Allowances for liabilities Other long term liabilities Liabilities, ASBM **Project prepayments** Total long term liabilities Short term liabilities Trade creditors Value added taxes Other current liabilities Debt to group companies Tax payable Total short term liabilities **Total liabilities** Total equity and liabilities Guarantees

#### Space Norway Group

| Note | 31.12.2022    | 31.12.2021    |
|------|---------------|---------------|
|      |               |               |
|      | 49 400 000    | 18 200 000    |
|      | -             | 31 200 000    |
| 10   | 420 814 584   | 420 814 584   |
|      | 470 214 584   | 470 214 584   |
|      |               |               |
| 10   | 905 889 992   | 838 357 555   |
|      | 905 889 992   | 838 357 555   |
| 10   | 1 376 104 576 | 1 308 572 139 |
|      |               |               |
|      |               |               |
|      | 25 775 500    | 20 868 000    |
|      | 4 000 000     | 4 000 000     |
| 11   | 520 935 800   | 405 692 400   |
| 12   | 2 533 766 352 | 113 955 911   |
|      | 3 084 477 652 | 2 683 647 977 |
|      |               |               |
| 9    | 29 210 491    | 37 648 696    |
|      | 15 575 656    | 15 510 777    |
| 9    | 296 874 187   | 253 717 276   |
| 9    | 0             | 0             |
|      | 36 407 500    | 29 586 500    |
|      | 378 067 834   | 336 463 249   |
|      | 3 462 545 486 | 3 020 111 226 |
|      | 4 838 650 060 | 4 328 683 366 |
| 13   | 50 000 000    | 38 022 164    |
|      |               |               |

# Statement of cash flow

| Cash flow from  | Space Norway AS            |  | Space Norway Group                      |   |
|---|----------------------------|--|---|---|
| operational activities  | 2022                       | 2021                                   | 2022                                    | 2021                                    |
| Profit before tax   | 6 455 632                  | 21 774 402                             | 98 204 443                              | 45 798 627                              |
| - Taxes paid  | -                          | -                                      | -29 072 888                             | -29 983 417                             |
| + Depreciation  | 13 374 902                 | 13 370 413                             | 102 859 424                             | 82 192 181                              |
| + Amortisation fixed assets   | -                          | -                                      | -                                       | -                                       |
| +/- Change in trade recievables<br>+/- Change in trade payables<br>+/- Agio/disagio | 4 700 977<br>-389 085<br>- | -9 948 306<br>1 900 727<br>-10 029 600 | -73 121 946<br>-8 438 208<br>47 743 400 | -1 967 318<br>-47 715 945<br>10 233 009 |
| +/- Change in other accounts  | -23 045 113                | 65 825 209                             | -62 018 057                             | 26 339 089                              |
| Net cash flow from<br>operational activities  | 1 097 313                  | 82 892 844                             | 76 156 168                              | 84 896 226                              |
| Cash flow from<br>investment activities   |                            |  |   |   |
| Purchase of property, plant and equipment   | -61 007 365                | -                                      | -510 706 323                            | -858 631 790                            |
| Cash from investments TS  |                            |  |   |   |
| Dividend  |                            |  | -                                       |   |
| Equity investment in Space<br>Norway Heosat AS                                      | -                          | -                                      |   |   |
| Other investment activities   | -100 756 164               | -                                      | -101 131 164                            | -                                       |
| Net cash flow from<br>investment activities   | -161 763 529               | -                                      | -611 837 487                            | -858 631 790                            |

| Cash flow from  | Space Nor    | way AS      | Space Norway Group |             |
|---|--------------|-------------|--------------------|-------------|
| financing activities                                      | 2022         | 2021        | 2022               | 2021        |
| Proceeds from new long<br>term debt                       | -            | -           | 67 500 000         | 385 429 791 |
| Change in financing og fibre cable and ASBM               | 85 601 788   | -13 627 224 | 377 192 576        | 140 807 191 |
| Repayment of short term<br>debt                           | -313 178 400 |             |                    |             |
| Equity injection  | -            | 323 208 000 | -                  | 323 208 000 |
| Net cash flow from<br>financing activities                | -227 576 612 | 309 580 776 | 444 692 576        | 849 444 982 |
| Net change in cash and cash<br>equivalents for the year   | -388 242 828 | 392 473 620 | -90 988 743        | 75 709 418  |
| Changes due to restated accounts for comparison           | -            | -           | -                  |             |
| + Cash and cash equiva-<br>lents at the start of the year | 542 282 045  | 149 808 425 | 747 883 286        | 672 173 868 |
| = Cash and cash equiva-<br>lents at the end of the year   | 154 039 216  | 542 282 046 | 656 894 545        | 747 883 286 |

# Styret i Space Norway

Skøyen, 24.05.2023



Svein Olav Munkeby Chairman of the Board



**Tore Olaf Rimmereid** Board member



Ann-Kari Heier Board member



Morten Haga Lunde Board member



**Siri Løvlund** Board member



Per Atle Våland Board member



Jostein Rønneberg CEO



Photo: Nina Holtan | ninaholtan.no

Space Norway

# **Note 1** Accounting principles

## Basis for consolidation of subsidiaries and joint venture

The group includes:

- Space Norway AS holding company in the group
- StatSat AS 100% owned subsidiary
- Space Norway Heosat AS 100% owned subsidiary
- KSAT 50% owned joint venture

The consolidated financial accounts show the financial statements presented as if the group was one single ecomonic entity. All intercompany matters have been eliminated in the group accounts. The group accouns are based on common and consistent accounting principles, in line with the holding company. Subsidiaries and the joint venture are recognised on historical cost in the accounts of the holding company. StatSat AS and Space Norway Heosat AS have been consolidated line by line in the group accounts. The joint venture KSAT has been consolidated according to the gross profit method.

### **General principles**

The financial statements for 2022 for the holding company and the group includes profit and loss statement, statement of financial position, statement of cash flow and notes to the accounts, have been prepeared in accordance with applicable financial reporting standards in Norway as of 31.12.2022.

The financial statements for the holding company and the group are bases on general principles of historical cost, comparability, the going concern assumption, congruence and the precautionary principle. Transacions are recognised according to the cost at the date of transaction. Income is recognized in the income statement when earned and costs are compiled in accordance with recognised revenues. Further details regarding the accounting plinciples are defined below. When actual figures are not available at the time of reporting, the accounding practice requires management to prepeare the best possible estimates for use in the profit and loss statement as well as statement of financial position. Please note that there may be a difference between estimates and the subsequent actual figures.

According to the relevant accounting principles, there are some exceptions to the general principles for recognition of income and costs. Where relevant, such exceptions are explained in the notes. In the applications of the accounting principles and presentation of transactions and other accounting issues, focus is on the economic effects and not only the pure legal basis. Probable, contingent, losses that can be quantified are accounted for in the financial statements.

# Classification of items in the statement of financial position

Assets relating to the product cycle as well as recievables payable within 12 months are defined as current assets. Other assets are classified as non-current assets. The same principle is applied with regards to liabilites.

### **Recognition of income**

Income is recognised in the profit and loss statement when it has been earned. Prepayments for services to be delivered for a longer periode are accrued and recognised at the time of delivery of the services in the future. Costs are compiled and recognised in the profit and loss statements in accordance with the time of delivery of the relevant services. Costs that cannot be attributed to the delivery of specific services are accounted for when they incur.

Received prepayments are recognized as revenue in the same period as the costs the prepayment is intended to cover. In cases where a prepayment is intended to cover an investment, the capitalized amount is reduced by the corresponding prepayment

#### Non-current assets

Non-current assets are recognised in the statement of financial posision at historical cost, net of accumulated depreciation and amortization. Costs relating to normal maintenance and repair are expended as they incur. Costs relating to replacements and renewals that will increase the economic lifetime of the assets are capitalised. Operating assets are expended when replaced. Assets are considered to be non-current when they represent a certain economic life time and a significant cost.

## **Facilities under construction**

The subsidiary Space Norway HEOSAT AS is involved in the construction of two new satellites as well as the ground segment required to operate the satellites. The value of these assets are recognised based on actual cost.

Norway AS (MicroSAR)

## Depreciation

Ordinary depreciations are recognised according to a linear model based on the life time of the assets, based on historical cost. This model is also applied for intangible assets. Depreciations are recognised as ordinary operating expenses in the profit and loss statement.

## Policies for foreign currency translation

Recievables and liabilities in foreign currency are converted to NOK based on the average exchange rate by the end of the accounting year.

# Deferred tax liabilities and taxes

Deferred tax liabilities at the end of the year are calculated on the basis of temporary differences between the respectible tax basis and the carrying amount in the statement of financial position. Calculation is based on the Norwegian nominal tax rate. Positive and negative differences are netted within corresponding time of occurence. However, items relating to acquisitons and pension liabilities are treated specifically. Deferred tax assets occur when temporary differences represent tax deductions in the future. Tax expense for the year is based on the change in deferred taxes and deferred tax assets and payable tax for the actual year corrected for possible prior errors in calculation of payable tax.

# One satellite is under construction in the holding company Space

### Statement of cash flow

The statement of cash flow is based on the indirect method. Cash and cash equivalents consist of cash, bank deposits and other short term liquid assets that can be converted to cash with insignificant risk and a maturity of less than three months.

### **Errors from previous years**

In 2022, a partial delivery related to the ASBM project has been separated and recognized as a long-term manufacturing contract. This change results in all earned revenue from this contract being recorded in the 2022 financial statements. The impact on previous years is not significant, and therefore, comparative figures have not been restated. We refer to note 3 for additional information.

# Note 2 Segment information

| Norway                  |
|-------------------------|
| Europe (outside Norway) |
| Asia                    |
| America                 |
| Other                   |
| Total revenues          |

# **Note 3** Accrued contract revenues

In connection with the ASBM project, in 2022, the group has separated a partial delivery of antennas with associated ground foundations as a manufacturing contract. Revenue recognition for this contract is based on incurred costs compared to estimated total costs. The recognized revenue in 2022 amounts to 96.5 million NOK, of which 48.5 million NOK relates to revenue earned in 2021. The recognized amount has been offset against the financial prepayment related to the ASBM project. The remaining unearned revenue amounts to 19 million NOK.

| Space Norway AS | Group       |
|-----------------|-------------|
| 119 305 302     | 289 340 431 |
| 0               | 191 417 500 |
| 0               | 90 574 000  |
| 0               | 307 011 000 |
| 0               | 7 557 000   |
| 119 305 302     | 885 899 931 |

# Note 4 Remuneration

|  | Space Norway AS |            | Group       |             |
|--|-----------------|------------|-------------|-------------|
| Payroll and pensions                     | 2022            | 2021       | 2022        | 2021        |
| Wages                                    | 30 500 954      | 27 499 700 | 180 562 189 | 143 142 423 |
| Employer's tax including pensions        | 5 201 131       | 4 588 687  | 17 659 383  | 13 483 722  |
| Pension costs                            | 2 571 564       | 2 409 144  | 16 806 858  | 12 381 349  |
| Other payroll expenses                   | 5 343 499       | 3 654 143  | 20 202 984  | 12 321 138  |
| Total payroll and expenses               | 43 617 148      | 38 151 674 | 235 231 414 | 181 328 631 |
| Number of emplyees as of 31.<br>December | 33              | 28         | 348         | 298         |

| Payroll and pensions in the subsidiary Space Norway HEOSAT AS are |
|---|
| capitalised as assets under construction. under utførelse.        |

|                                      | CEO       | Board   |
|--------------------------------------|-----------|---------|
| Wages and remunerationf to the board | 1 576 499 | 845 250 |
| Pension costs                        | 98 640    | -       |
| Other remuneration                   | 60 000    | -       |

The Space Norway group applies a moderate wage policy.

Space Norway has an agreement regarding compulsory occupational pension scheme (OTP) for all employees with Storebrand.

|  | 2021      |           | 2022      |           |
|--|-----------|-----------|-----------|-----------|
| _  | Space     |           | Space     |           |
| Fees to external auditor                     | Norway AS | Group     | Norway AS | Group     |
| Statutory audit                              | 200 000   | 601 000   | 300 000   | 485 000   |
| Advisory services relating to the accounting | 50 000    | 50 000    | 97 456    | 148 974   |
| Tax consultancy services in KSAT             | -         | 1 894 500 | -         | 1 026 000 |
| Other non-audit services                     | 285 962   | 497 472   | 90 388    | 261 934   |
| Total fees                                   | 535 962   | 3 042 972 | 487 844   | 1 921 908 |

The company has not issued any loans or guarantees to the CEO, members of the board or other related parties.

The company has no obligation to provide members of executive management, board members or the chairman of the board any

specific remuneration or payment upon termination or change in employment or position.

The company has not entered into any agreement with members of the board or executive management regarding share of profit or options.

The company has no obligations to provide options or other rights regarding the purchase, subscription or divesture of shares for members of the board or executive management.

# The BoD has issued its own remuneration declaration

| Members of excecutive    |                 |              |              |                |          |
|--------------------------|-----------------|--------------|--------------|----------------|----------|
| management and/or        | Wages and board | Other        | Paid pension | Funded pension | Loan/    |
| board of directors, 2022 | remuneration    | remuneration | premiums     | scheme         | Comments |
| Chairman of the board    | 350 000         |              |              | 0              | 0        |
| CEO                      | 1 633 028       | 60 000       | 198          | 110 585        | 0        |
| Head of infrastructure   | 1 295 715       |              | 12 558       | 110 585        | 0        |
| CFO                      | 1 354 063       | 1 474        | 12 593       | 110 585        | 0        |

Remuneration in 2021

| 2021                   | Lønn og styre honorarer | Andre ytelser | Innbetalt pensjon | Lån/merknad |
|------------------------|-------------------------|---------------|-------------------|-------------|
| Chairman of the board  | 309 000                 | -             | 0                 | 0           |
| CEO                    | 1 576 499               | 60 000        | 98 640            | 0           |
| Head of infrastructure | 1 245 799               | 106 317       | 96 870            | 0           |
| CFO                    | 1 307 905               | 4 392         | 94 961            | 0           |

Space Norway

# **Note 5** Financial income and expenses

|                               | Space Norway AS |            | Group      |            |
|-------------------------------|-----------------|------------|------------|------------|
|                               | 2022            | 2021       | 2022       | 2021       |
| Foreign currency gains        | 6 301 216       | 10 302 618 | 24 481 216 | 41 797 768 |
| Recognized group contribution |                 | 33 387 951 |            |            |
| Other financial income        | 66 103 213      |            | 6 516 569  | -          |
| Total financial income        | 72 404 429      | 43 690 569 | 30 997 785 | 41 797 768 |
|                               |                 |            |            |            |
| Foreign currency losses       | 9 611 726       | 5 624 568  | 31 014 967 | 53 387 757 |
| Write-down of shares          |                 | 33 387 951 |            |            |
| Other financial expenses      | 6 838 023       | -          | 32 822 831 | -          |
| Total financial expenses      | 16 449 749      | 39 012 519 | 63 837 798 | 53 387 757 |

Space Norway

# Note 6 Taxes

| Tax expense — Space Norway AS                           | 2022         | 2021         |
|---|--------------|--------------|
| Profit before taxes                                     | 6 455 632    | 32 569 335   |
| Permanent differences                                   | -51 709 146  | -60 849 477  |
| Change in temporary differences                         | 6 102 261    | 4 181 290    |
| Group contribution recieved                             | 0            | 7 708 799    |
| To (+) / from (-) deferred tax assets                   | 0            | 0            |
| Basis for calculating tax expense                       | -39 151 253  | -16 390 055  |
| Tax expense before group contribution                   | 0            | -7 345 349   |
| Effect of group contribution                            | 0            | 7 345 349    |
| Tax expense for the year (16-22 %)                      | 0            | 0            |
| Reconciliation of tax expense:                          |              |              |
| Tax expense on net income for the year                  | 0            | 0            |
| Change in deferred tax                                  | 0            | 0            |
| Taxes related to previous years                         | 0            | 0            |
| Total tax expense for the year                          | 0            | 0            |
| Rasis for deferred tax assets differences to be netted: |              |              |
| Non-current assets                                      | -30 857 898  | -24 784 370  |
| Profit-/loss account                                    | 114 927      | 143 659      |
| Other receivables                                       | 0            | 0            |
| Provisions for commitments                              | -4 000 000   | -4 000 000   |
| Financial assets  | 0            | 0            |
| Pension liabilities                                     | 0            | 0            |
| Tax loss carry forwards                                 | -232 595 683 | -194 338 008 |
| Basis for deferred tax                                  | -267 338 654 | -222 978 718 |
| Differences not included in temporary differences       | 267 338 654  | 222 978 718  |
| Basis for calculation of deferred tax assets            | 0            | 0            |
| Deferred tax assets as of 31. December                  | 0            | 0            |

| Profit b | efore taxes                           |
|----------|---------------------------------------|
| Permai   | nent differences                      |
| Chang    | e in temporary differences            |
| Group    | contribution recieved                 |
| To (+) / | from (-) deferred tax assets          |
| Basis f  | or calculating tax expense            |
| Tax exp  | pense before group contribution       |
| Effect o | of group contribution                 |
| Tax ex   | pense for the year (16-22 %)          |
| Recon    | riliation of tax expenses             |
| Ταχ εχι  | pense on net income for the year      |
| Chana    | e in deferred tax                     |
| Taxes r  | related to previous years             |
| Total to | ax expense for the year               |
|          |                                       |
| Basis f  | or deferred tax assets, differences   |
| Non-cı   | irrent assets                         |
| Profit-/ | loss account                          |
| Other r  | eceivables                            |
| Provisi  | ons for commitments                   |
| Financi  | al assets                             |
| Pensio   | n liabilities                         |
| Tax los  | s carry forwards                      |
| Basis f  | or deferred tax                       |
| Differe  | nces not included in temporary diffe  |
|          |                                       |
| Basis f  | or calculation of deferred tax assets |

A part of the operations in the group relates to Svalbard with an applicable tax rate of 16%. When calculating deferred tax assets in the statement of financial position, the applicable tax rate for this part of the operations has been applied.

|                   | 2022         | 2021         |
|-------------------|--------------|--------------|
|                   | 98 204 443   | 45 798 627   |
|                   | 5 234 125    | 21 661 448   |
|                   | 20 655 814   | 10 163 014   |
|                   | 0            | -33 088 500  |
|                   | -56 129      | -141 722     |
|                   | 124 038 253  | 44 392 867   |
|                   | 36 407 500   | 29 586 500   |
|                   | 0            | 0            |
|                   | 36 407 500   | 29 586 500   |
|                   |              |              |
|                   |              | 20 151 000   |
| r                 | 36 407 500   | 30 151 000   |
|                   | -3 /44 492   | -850779      |
|                   | -1 000       | 0            |
|                   | 32 662 008   | 29 300 221   |
| ces to be netted: |              |              |
|                   | -87 209 971  | -72 935 889  |
|                   | -930 073     | -1 162 341   |
|                   | -2 550 000   | -2 550 000   |
|                   | -27 268 000  | -24 868 000  |
|                   | -1 160 500   | 417 500      |
|                   | -2 507 000   | 603 000      |
|                   | -277 823 623 | -194 546 585 |
|                   | -399 449 167 | -295 042 315 |
| differences       | 291 841 048  | 222 978 718  |
| sets              | -107 608 119 | -72 063 596  |
| er                | -20 560 684  | -15 512 691  |

# **Note 7** Fixed assets

| Space Norway   | Machinery<br>and plants | Land, buildings and<br>other property | Operating mova<br>property, furniture |
|--|-------------------------|---------------------------------------|---------------------------------------|
| Historical cost as of 1. January 2022                    | 295 407 505             | 2 010 903                             | 5 761 1                               |
| Investments  | 0                       | 0                                     | 134 6                                 |
| Disposals (at cost)                                      | 0                       |                                       |                                       |
| Total cost on 31. December 2022                          | 295 407 505             | 2 010 903                             | 5 895 7                               |
| Accumulated depreciation and write-downs on 31. December | -221 721 526            | -616 703                              | -4 354 8                              |
| Book value 31. December 2022                             | 73 685 979              | 1 394 200                             | 1 540 9                               |
| Ordinary depreciation for the year                       | 12 281 004              | 72 840                                | 1 021 0                               |
| Depreciation period (ordinary)                           | 25 years                | 25 years                              | 5 ye                                  |
| Depreciation plan  | Linear                  | Linear                                | Lin                                   |

| Konsern:   | Machinery<br>and plants | Land, buildings and<br>other property | Operating mova property, furniture of |
|--|-------------------------|---------------------------------------|---------------------------------------|
| Historical cost as of 1. January 2022                    | 1 157 847 505           | 192 949 403                           | 87 699 9                              |
| Investments  | 130 697 500             | 23 306 000                            | 15 382 2                              |
| Disposals (at cost)                                      | 0                       | 0                                     |                                       |
| Total cost on 31. December 2022                          | 1 288 545 005           | 216 255 403                           | 103 082 2                             |
| Accumulated depreciation and write-downs on 31. December | 669 673 526             | 52 727 703                            | 76 893 8                              |
| Book value 31. December 2022                             | 618 871 479             | 163 527 700                           | 26 188 2                              |
| Ordinary depreciation for the year                       | 80 987 504              | 8 720 840                             | 13 114 (                              |
| Depreciation for the year                                | 0                       | 0                                     |                                       |
| Depreciation period (ordinary)                           | 15-25 years             | 20-50 years                           | 5-10 ye                               |
| Depreciation plan  | Linear                  | Linear                                | Lin                                   |

A reclassification of historical cost has been made in 2022 for assets under construction fom the other groups of 22 364 500

|               | Assets under  | ble  |
|---------------|---------------|------|
| Total         | construction  | etc. |
| 303 179 524   | 0             | .16  |
| 61 007 365    | 60 872 765    | 600  |
| 0             |               |      |
| 364 186 889   | 60 872 765    | '16  |
| -226 693 035  | 0             | 806  |
| 137 493 854   | 60 872 765    | 910  |
| 13 374 902    | 0             | )58  |
|               | None          | ars  |
|               |               | ear  |
|               |               |      |
|               | Assets under  | ble  |
| Total         | construction  | etc. |
| 3 892 945 205 | 2 454 448 328 | 969  |
| 510 571 223   | 341 185 578   | .45  |
| 0             | 0             | 0    |
| 4 403 516 428 | 2 795 633 906 | .14  |
| 799 295 119   | 0             | 890  |
| 3 604 221 309 | 2 795 633 906 | 224  |
| 102 822 402   | 0             | )58  |
|               | 0             | 0    |
|               | none          | ars  |
|               |               | ear  |
|               |               |      |

# **Note 8** Shares in subsidiaries and joint ventures

| Space Norway AS:                 | Business address | Number of<br>shares outstanding | Number of<br>shares owned | Nominal value<br>per share | Group's share of<br>capital and wotes | Book value<br>31.12.2021 |
|----------------------------------|------------------|---------------------------------|---------------------------|----------------------------|---------------------------------------|--------------------------|
| StatSat AS                       | Oslo             | 1000                            | 1000                      | 1 000                      | 100%                                  | 2 000 000                |
| Space Norway Heosat AS           | Oslo             | 100                             | 100                       | 503 000                    | 100%                                  | 471 311 824              |
| Ksat AS                          | Tromsø           | 2 000 000                       | 1 000 000                 | 1                          | 50%                                   | 2 892 000                |
| Total, shares in other companies |                  |                                 |                           |                            |                                       | 476 203 824              |

The ownership in KSAT is consolidated in the group accounts in accordance with the gross method.

In 2022, NOK 65million is dividends from KSAT to Space Norway.

# Note 9 Restricted funds

A total of NOK 1 741 479 in cash represents restricted funds relating to tax decuction on behalf of employees for Space Norway AS and NOK 9 622 050 for the Group.

# Note 10 Transactions with related parties

The company is a related party with the following companies within the group:

- Space Norway AS (holding company)
- Statsat AS (subsidiary)
- Space Norway HEOSAT AS (subsidiary)
- Kongsberg Satellite Services AS (50% owned joint venture)

l konsernregnskapet elimineres 50% av mellomværende og transaksjoner med ksat.

| Accounts receivable and other receivables | 2022      | 2021       |
|---|-----------|------------|
| Ksat                                      | 179 996   | 874 999    |
| StatSat                                   | 788 972   | 1 080 876  |
| Heosat                                    | 6 767 921 | 12 406 246 |
| Total                                     | 7 736 889 | 14 362 121 |

| Liabilities and accounts payable | 2022       | 2021        |
|----------------------------------|------------|-------------|
| Ksat                             | 7 200 000  | 7 200 000   |
| StatSat                          | -          | -           |
| Heosat                           | 7 466 003  | 313 178 400 |
| Total                            | 70 479 055 | 403 020 009 |

#### Transactions

Revenues from group companies Purchase from group companies

# The non-consolidated part of Ksat is considered as a related party

#### Long term receivables

Receivables and other short term receivable Accounts payable and other short term liak Revenues from related parties Purchase from related parties

| 2022       | 2021       |
|------------|------------|
| 10 281 799 | 29 092 626 |
| -          | 334 394    |

| 2022       | 2021  |
|------------|---|
| 68 976 362 | 76 007 312  |
| 38 839 528 | 45 049 023  |
| 7 379 239  | 6 617 399   |
| 21 797 166 | 22 072 744  |
|            | 2022<br>68 976 362<br>38 839 528<br>7 379 239<br>21 797 166 |

# Note 11 Equity

Total paid-in equity is NOK 49 400 000, based on 2 600 000 shares each with a nominal value of NOK 19 per share.

# Ownership

All the shares in the company are owned by the Norwegian Ministry of Trade, Industry and Fisheries.

| Space Norway AS                              | Share capital | Premium fund | Other equity | Total equity |
|--|---------------|--------------|--------------|--------------|
| Equity as of 1. January 2022                 | 49 400 000    | 420 814 584  | 186 837 009  | 657 051 593  |
| Resolved, not registered issue of new shares | 0             | 0            | 0            | 0            |
| Retained earnings for the year               | 0             | 0            | 6 455 632    | 6 455 632    |
| Equity as of 31. December 2022               | 49 400 000    | 420 814 584  | 193 292 641  | 663 507 225  |
|  |               |              |              |              |

| Group                                    | Share capital | Premium fund | Other equity | Total equity  |
|--|---------------|--------------|--------------|---------------|
| Equity as of 1. January 2022             | 49 400 000    | 420 814 584  | 838 357 555  | 1 308 572 139 |
| Difference related to conversion from TS |               |              | 1 989 500    | 1 989 500     |
| Retained earnings for the year           |               |              | 65 542 436   | 65 542 436    |
| Equity as of 31. December 2022           | 49 400 000    | 420 814 584  | 905 889 491  | 1 376 104 075 |

# Note 12 Currency loan

Space Norway Heosat AS entered into a loan agreement in 2021 for a facility agreement of 110 000 000 USD. By the end of 2022, 46 000 000 USD of this credit has been utilized. The loan matures in more than 5 years. The debt has been converted to Norwegian kroner based on the exchange rate on the balance date, resulting in an unrealized foreign exchange loss of NOK 47 743 400.

The current loan is a construction loan and will be converted into a longterm loan once the satellites are operational. The loan has conditions related to debt servicing capability. The loan is secured by an interest rate swap agreement

# **Note 13** Financing of the fibre cable, ASBM and MicroSAR

Prepayments relates to the following ongoing projects per 31.12

| Holding Company                 | 2022  | 2021                                      |
|---------------------------------|---|---|
| Fibre Cable                     | 103 986 029                                 | 118 384 241                               |
| MicroSAR                        | 100 000 000                                 | 0   |
| Total                           | 203 986 029                                 | 118 384 241                               |
| Holding Company                 | 2022  |   |
| riolaling company               | 2022  | 2021                                      |
| Fibre Cable                     | 103 986 029                                 | <b>2021</b><br>118 384 241                |
| Fibre Cable<br>MicroSAR         | 103 986 029<br>100 000 000                  | 2021<br>118 384 241<br>0                  |
| Fibre Cable<br>MicroSAR<br>ASBM | 103 986 029<br>100 000 000<br>2 329 780 323 | 2021<br>118 384 241<br>0<br>2 139 131 666 |

The long-term debt is owed to the Norwegian Space Agency in connection with the investment in a fiber cable between Svalbard and the mainland. The company, in collaboration with the Norwegian Space Agency, has committed to providing satellite data to NOAA and NASA over a period of 25 years. The receivables from NOAA and NASA resulting from this service were sold to the American financing company HannonArmstrong. Based on this, HannonArmstrong provided a loan to Norsk Romsenter Eiendom AS for the investment in the fiber connection. The loan from HannonArmstrong has been repaid. The amount in this entry now represents the parent company's and the group's remaining obligations to NOAA and NASA. The operation of the cable is secured with a guarantee consortium comprised of stakeholders and customers. In connection with the disruption of segment 1 in January 2022, there is a need for a repair, which is planned to be carried out in the spring of 2023 where the guarantee amount will be used.

# **Financing ASBM**

The long-term debt as of 31. December 2022 is associated with prepayments received from customers for future provision of services. These services are scheduled to begin when the ASBM capacity becomes operational.

# **Financing of MicroSAR**

The long term debt at the end of 2022 concering MicroSAR consists of prepayments from customers for delivery of services that will be taken into use once the satellite system is operative.

# Pre payments ASBM

The long term NOK 69 million receivable in the Group consists of prepayments to KSAT for the building of antennas and delivery of services connected to the ASBM programme which will be taken into use once the satellite system is operational.

# Note 14 Deposit/Guarantees

The parent company has provided a guarantee and paid a deposit totaling 5 million USD to the Federal Communications Commission (FCC) for market access in the United States. If the project that the market access is intended to cover is not realized, the paid deposit/ guarantee will be considered as a loss for the company.

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# **Auditor's report**

+ + +

|  |  | Space Norway |  |
|--|--|--------------|--|
|  |  |              |  |

# 1 Foto: Northrop Grumman



KPMG AS Sørkedalsveien 6 P.O. Box 7000 Majorstuen Telephone +47 45 40 40 63 Internet www.kpmg.no Enterprise 935 174 627 MVA

Til generalforsamlingen i Space Norway AS

#### Uavhengig revisors beretning

#### Konklusjon

Vi har revidert årsregnskapet for Space Norway AS, som består av:

- selskapsregnskapet, som består av balanse per 31. desember 2022, resultatregnskap og kontantstrømoppstilling for regnskapsåret avsluttet per denne datoen og noter til årsregnskapet, herunder et sammendrag av viktige regnskapsprinsipper, og
- konsernregnskapet, som består av balanse per 31. desember 2022, resultatregnskap og kontantstrømoppstilling for regnskapsåret avsluttet per denne datoen og noter til årsregnskapet, herunder et sammendrag av viktige regnskapsprinsipper.

#### Etter vår mening

- oppfyller årsregnskapet gjeldende lovkrav,
- gir selskapsregnskapet et rettvisende bilde av selskapets finansielle stilling per 31. desember 2022 og av dets resultater og kontantstrømmer for regnskapsåret avsluttet per denne datoen i samsvar med regnskapslovens regler og god regnskapsskikk i Norge, og
- gir konsernregnskapet et rettvisende bilde av konsernets finansielle stilling per 31. desember 2022 og av dets resultater og kontantstrømmer for regnskapsåret avsluttet per denne datoen i samsvar med regnskapslovens regler og god regnskapsskikk i Norge.

#### Grunnlag for konklusjonen

Vi har gjennomført revisjonen i samsvar med International Standards on Auditing (ISA-ene). Våre oppgaver og plikter i henhold til disse standardene er beskrevet nedenfor under Revisors oppgaver og plikter ved revisjonen av årsregnskapet. Vi er uavhengige av selskapet og konsernet i samsvar med kravene i relevante lover og forskrifter i Norge og International Code of Ethics for Professional Accountants (inkludert internasjonale uavhengighetsstandarder) utstedt av International Ethics Standards Board for Accountants (IESBA-regiene), og vi har overholdt våre øvrige etiske forpliktelser i samsvar med disse kravene. Innhentet revisjonsbevis er etter vår vurdering tilstrekkelig og hensiktsmessig som grunnlag for vår konklusjon.

#### Øvrig informasjon

Styret og daglig leder (ledelsen) er ansvarlige for informasjonen i årsberetningen. Øvrig informasjon omfatter informasjon i årsrapporten bortsett fra årsregnskapet og den tilhørende revisjonsberetningen. Vår konklusjon om årsregnskapet ovenfor dekker ikke informasjonen i årsberetningen.

I forbindelse med revisjonen av årsregnskapet er det vår oppgave å lese årsberetningen. Formålet er å vurdere hvorvidt det foreligger vesentlig inkonsistens mellom årsberetningen og årsregnskapet og den kunnskap vi har opparbeidet oss under revisjonen av årsregnskapet, eller hvorvidt informasjon i årsberetningen ellers fremstår som vesentlig feil. Vi har plikt til å rapportere dersom årsberetningen fremstår som vesentlig feil. Vi har ingenting å rapportere i så henseende.

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#### KPMG

Basert på kunnskapen vi har opparbeidet oss i revisjonen, mener vi at årsberetningen

- er konsistent med årsregnskapet og
- inneholder de opplysninger som skal gis i henhold til gjeldende lovkrav.

#### Ledelsens ansvar for årsregnskapet

Ledelsen er ansvarlig for å utarbeide årsregnskapet og for at det gir et rettvisende bilde i samsvar med regnskapslovens regler og god regnskapsskikk i Norge. Ledelsen er også ansvarlig for slik intern kontroll som den finner nødvendig for å kunne utarbeide et årsregnskap som ikke inneholder vesentlig feilinformasjon, verken som følge av misligheter eller utilsiktede feil.

Ved utarbeidelsen av årsregnskapet er ledelsen ansvarlig for å ta standpunkt til selskapets og konsernets evne til fortsatt drift, og opplyse om forhold av betydning for fortsatt drift. Forutsetningen om fortsatt drift skal legges til grunn for årsregnskapet så lenge det ikke er sannsynlig at virksomheten vil bli avviklet.

#### Revisors oppgaver og plikter ved revisjonen av årsregnskapet

Vårt mål er å oppnå betryggende sikkerhet for at årsregnskapet som helhet ikke inneholder vesentlig feilinformasjon, verken som følge av misligheter eller utilsiktede feil, og å avgi en revisjonsberetning som inneholder vår konklusjon. Betryggende sikkerhet er en høy grad av sikkerhet, men ingen garanti for at en revisjon utført i samsvar med ISA-ene, alltid vil avdekke vesentlig feilinformasjon. Feilinformasjon kan oppstå som følge av misligheter eller utilsiktede feil. Feilinformasjon er å anse som vesentlig dersom den enkeltvis eller samlet med rimelighet kan forventes å påvirke de økonomiske beslutningene som brukerne foretar på grunnlag av årsregnskapet.

Som del av en revisjon i samsvar med ISA-ene, utøver vi profesjonelt skjønn og utviser profesjonell skepsis gjennom hele revisjonen. I tillegg:

- av internkontroll.
- for en mening om effektiviteten av selskapets og konsernets interne kontroll.
- evaluerer vi om de anvendte regnskapsprinsippene er hensiktsmessige og om regnskapsestimatene og tilhørende noteopplysninger utarbeidet av ledelsen er rimelige.
- konkluderer vi på om ledelsens bruk av fortsatt drift-forutsetningen er hensiktsmessig, og, basert på innhentede revisjonsbevis, hvorvidt det foreligger vesentlig usikkerhet knyttet til Våre konklusjoner er basert på revisjonsbevis innhentet frem til datoen for og konsernet ikke kan fortsette driften.
- tilleggsopplysningene, og hvorvidt årsregnskapet gir uttrykk for de underliggende transaksjonene og hendelsene på en måte som gir et rettvisende bilde.

identifiserer og vurderer vi risikoen for vesentlig feilinformasjon i regnskapet, enten det skyldes misligheter eller utilsiktede feil. Vi utformer og gjennomfører revisjonshandlinger for å håndtere slike risikoer, og innhenter revisjonsbevis som er tilstrekkelig og hensiktsmessig som grunnlag for vår konklusjon. Risikoen for at vesentlig feilinformasjon som følge av misligheter ikke blir avdekket, er høyere enn for feilinformasjon som skyldes utilsiktede feil, siden misligheter kan innebære samarbeid, forfalskning, bevisste utelatelser, uriktige fremstillinger eller overstyring

opparbeider vi oss en forståelse av intern kontroll som er relevant for revisjonen, for å utforme revisjonshandlinger som er hensiktsmessige etter omstendighetene, men ikke for å gi uttrykk

hendelser eller forhold som kan skape tvil av betydning om selskapets og konsernets evne til fortsatt drift. Dersom vi konkluderer med at det eksisterer vesentlig usikkerhet, kreves det at vi i revisjonsberetningen henleder oppmerksomheten på tilleggsopplysningene i årsregnskapet, eller, dersom slike tilleggsopplysninger ikke er tilstrekkelige, at vi modifiserer vår konklusjon. revisjonsberetningen. Etterfølgende hendelser eller forhold kan imidlertid medføre at selskapet

• evaluerer vi den samlede presentasjonen, strukturen og innholdet i årsregnskapet, inkludert

### KPMG

• innhenter vi tilstrekkelig og hensiktsmessig revisjonsbevis vedrørende den finansielle informasjonen til enhetene eller forretningsområdene i konsernet for å kunne gi uttrykk for en mening om konsernregnskapet. Vi er ansvarlige for å lede, følge opp og gjennomføre konsernrevisjonen. Vi har eneansvar for vår konklusjon om konsernregnskapet.

Vi kommuniserer med styret blant annet om det planlagte innholdet i og tidspunkt for revisjonsarbeidet og eventuelle vesentlige funn i revisjonen, herunder vesentlige svakheter i intern kontroll som vi avdekker gjennom revisjonen.

Oslo, 7. juni 2023 KPMG AS

Øivind Karlsen Statsautorisert revisor (elektronisk signert)

# ΡΕΠΠЭΟ

The signatures in this document are legally binding. The document is signed using Penneo™ secure digital signature. The identity of the signers has been recorded, and are listed below.

"By my signature I confirm all dates and content in this document."

#### Øivind Karlsen Oppdragsansvarlig revisor

Serial number: 9578-5997-4-377389 IP: 80.232.xxx.xxx 2023-06-07 07:25:05 UTC

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# Reports Equality statement



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# **Space Norway AS** – Equality statement 2022

The Group comprises the holding company Space Norway AS including the 100% owned subsidiaries Statsat AS and Space Norway HEOSAT AS, as well as a 50% ownership in Kongsberg Satellite Services AS.

In the following presentation, the conditions of the parent company and its wholly-owned subsidiaries are taken into account and referred to as the company or the group.

For our 50% owned subsidiary, KSAT, please refer to KSAT's own statement.

Our employees have a high level of education and expertise, both in general and within the space industry/telecommunications sector. The personnel resources within the group consist predominantly of men, and we have few female leaders. This is due to the industry traditionally being male-dominated, and there have been few female applicants with the necessary qualifications and experience in response to job postings within our organization. We have one woman in the corporate leadership team and one female project manager.

The management is committed to treating women and men equally. Salary differences arise from the fact that we have more senior men with higher age and long tenure, while several women are younger and have shorter tenure. We have an individual compensation system outside of salary structures that set specific salary levels. Therefore, there may be specific valid reasons for salary differences,

such as performance, competitive starting salaries, our desire to attract particular expertise, and more.

In our daily operations, we focus on specific tasks and work together to address challenges regardless of gender representation. The management emphasizes that tasks should be accomplished in a good working environment, with a focus on well-being.

# **Employees and salary conditions**

As per 2022.12.31 Space Norway had 48 employees and an average salary of NOK 1,078,200





In 2022, we had 3 part-time employees, including 1 temporary employee. The management team consists of two men and one woman. The extended management team consists of an additional 4 men. The average salary in these two management teams, excluding the salary of the CEO, is NOK 1,375,000.

Excluding the CEO's salary, there is no difference in salary between men and women in our organization. For the other 6 women, responsibility, experience, and competence are the determining factors for salary levels. Among them, there is 1 senior engineer with significant responsibilities and extensive experience, as well as 3 recently graduated engineers.

For further assessment of compensation, we have looked at the following groups:

### **Project managers/Managers**

Managers have technical and professional responsibilities, while project managers are responsible for the progress and execution of tasks within a defined project with approved cost frameworks and a schedule. This group has an average salary of NOK 1,178,000.

We have 1 woman in the project manager group.

### **Technical specialists**

Support functions with specialized knowledge in areas such as legal matters, regulatory affairs, economics, etc., are staffed by specialists who have an average salary of NOK 1,039,000.

### **Senior Engineers**

Engineers with extensive (more than 10 years) and diverse experience in various fields within the industry have an average salary of NOK 1,077,000

### Engineers

Engineers with experience ranging from 0 to 10 years have an average salary of NOK 701,000.

When we compare the group of engineers, women have lower salaries than men, primarily due to less experience and fewer years since they completed their education. However, when we compare based on experience background, there is no difference in salary between women and men in the engineer group. Space Norway is bound by the main agreement entered into with Tekna (which is the employee association with the most members in our group), and general wage negotiations are conducted annually with Tekna. The management then evaluates compensation based on input from Tekna and the year's salary discussions between managers and employees. Collaborative meetings with Tekna are held at least 4 times a year. Tekna has raised topics and provided input for discussions on several important areas beyond just wage negotiations, such as:

- Overtime Payment in Employment Contracts
- Pension Plan
- Competence Assessment (Competence Mapping)
- **Employee Surveys**

Remote Work (Home Office) Policies and Adaptation Due to COVID-19

AMU meetings are held four times per year, with focus on working environment and work satisfaction as well as issues brought up by Tekna or the health and safety representative..

# Parental leave

In 2022, 1 woman and 1 man have taken parental leave. We follow government guidelines for salary and leave of absence approvals, and both have been granted the leave they applied for.

# Benefits and bonuses

The managing director has a fixed car allowance of limited scope. We pay commuting allowances in accordance with government guidelines and as per individual agreements. The company has no other bonus schemes or additional benefits.

# **Equality efforts**

Our commitment to gender equality is reflected in the company's strategy, procedures, and routines. We have developed a separate reporting procedure to prevent harassment and gender-based violence. During annual employee reviews, employees are encouraged to raise any concerns or dissatisfaction related to gender equality, harassment cases, or other issues. Considerations for gender equality and non-discrimination are also incorporated into our overall personnel policies. We review our ethical guidelines with all employees twice a year. In our new recruitment processes, competence is always the primary criterion, followed by the requirement that an applicant must be able to obtain security clearance, be authorized, and communicate in the company's working language, which is Norwegian. We operate in an industry where traditionally there have been few women, but this is gradually changing. According to our guidelines, when advertising job positions, female applicants should always be invited for an interview if they possess the competence that meets our needs.

In 2022, we did not have any employees with special needs or disabilities, so no specific adjustments were made to the physical premises.

However, we do have accessible facilities, including a handicap-accessible toilet and door-free access in one part of the premises, which provides a foundation for accommodating any applicants with physical disabilities.

Our employees have access to a shared cafeteria within the building. In the cafeteria, there is access to gluten-free food, and special dietary requirements for individuals with allergies can be accommodated upon prior arrangement.

# Diversity

The majority of our employees are of Norwegian origin, but we also have a few with different cultural backgrounds. Our working language is Norwegian, and it is a requirement that employees speak Norwegian fluently.

# Sick Leave

In 2022, women had a sick leave rate of 4.75%, while men had a sick leave rate of 1.78%. The total sick leave rate for the company was 2.34%.

# Efforts going forward

In our strategy, we have a clear and stated goal of achieving gender equality. With each job vacancy announcement, we will strive to move closer to this goal within the parameters set by the company's competency requirements and security clearance criteria, among others.

It has been decided that in 2023, we will conduct an employee survey to gather more specific feedback from our employees on work environment, job satisfaction, and workload.

# Risks/Elements preventing full equality in the workplace

- There are few female applicants to our vacancies
- Women with the required experience and education are in minority
- Several of our positions require some business travelling which during periods can be particularly challenging for employees with younger children
- Based on the nature of Space Norway's work assignments we require employees who can be security-cleared and authorized, making it challenging to hire persons with a foreign national background
- The working language at the company is Norwegian and applicants must be proficient/fluent in speaking, reading and writing Norwegian

# Measures to promote increased gender equality

- We will continue to pay special attention to any female applicants to future vacancies
- We have initiated a collaboration with Norwegian universities that offer relevant programs for our needs (space science and tele-communications) and provide information about the company, job tasks, and future opportunities at student job fairs.
- We will facilitate, to the extent possible, working conditions for employees with younger children

# Guidelines for determining the salary and other compensation for executive personnel

These guidelines have been prepared by the Board of Space Norway AS in accordance with the company's articles of association § 8, as well as in accordance with the "Government Guidelines for Executive Compensation in Companies with State Ownership" (established by the Ministry of Trade, Industry, and Fisheries on 12.12.2022) and the expectations expressed in Report No. 6 (Meld. St. 6) (2022-2023) State Direct Ownership in Companies - A Greener and More Active State Ownership.



1 Foto: James Padolsey

The guidelines are subject to approval by the General assembly. The Board's guidelines shall be presented to the General Assembly at least every fourth year and in the event of any "significant change."

Executive personnel within the group include the Chief Executive Officer (CEO) and two employees in the roles of Director of Infrastructure/Security and Director of Finance/Administration (collectively referred to as "executive employees"), as well as members of the Board. Compensation for board members is determined by the General Assembly.

Space Norway's continued growth and profitability depend on motivated employees and effective leaders. Individual salaries should be perceived as predictable and fair. Compensation should contribute to motivating sustainable development and generating good returns over time. Space Norway has a uniform compensation policy aimed at promoting results and making us a great workplace, but we do not aim to be a compensation leader. Our compensation policy is approved by the Board.

Within the framework of these guidelines, the remuneration for the CEO is determined by the Board, and the remuneration for other executive employees is determined by the CEO in consultation with the Chairman of the Board.

The compensation package for executive personnel at Space Norway consists of a fixed salary, pension benefits, and other allowances or fringe benefits. The primary component of the remuneration is the fixed salary.

The company observes a 3-month notice period for all employees.

Normally, severance pay or compensation in connection with termination is not practiced. In cases where specific agreements are made for severance pay upon termination initiated by the company, the agreed severance pay and salary during the notice period should not exceed a total of 12 months' salary. Severance pay is typically reduced on a one-to-one basis if the executive employee, during the severance pay period, takes on a new position, acquires new paid roles, or earns income from business activities in which they are an active owner.

Upon termination, further salary payments cease, and the company's contributions to the individual's pension and insurance plans also cease.

# Main principles for determining compensation for executive employees

The salary level in Space Norway AS should not be leading but competitive. Consideration for moderation shall be maintained. This includes, among other things, that the remuneration is not higher than necessary to attract and retain the desired expertise.

Compensation schemes must be designed in a way that prevents unreasonable remuneration due to external factors beyond the control of management. The Board should have an overview of the total value of each leader's agreed-upon compensation and ensure that executive compensation arrangements do not have adverse effects on the company or undermine the company's reputation. Individuals in leadership positions should not receive separate compensation for board roles in 100% owned subsidiaries within the same group.

Variable pay, bonuses, or similar compensation practices are not implemented.

### **Base salary**

Base salary is determined upon commencement and is based on the level of competence and responsibilities, subject to an annual review in conjunction with salary negotiations. As part of the moderation assessment during salary negotiations, differences in compensation between senior executives and other employees will be considered, including taking into account nominal salary growth for other employees. If the growth in total compensation, or in individual compensation components, is greater for senior executives than for other employees, either in percentage or nominal terms, the board shall provide a specific rationale in the company's salary report.

Base salary may also be adjusted in the event of changes in duties or an expanded scope of responsibilities. Moderation is also exercised in such salary evaluations and adjustments.

#### Pension

The pension terms for senior executives are on par with the terms of other employees in the company. The group has a defined contribution pension scheme with Storebrand. The pensionable salary is capped at 12 G.

# **Other allowances**

The company covers expenses for mobile phones and, by agreement, also home internet connections. The company reimburses business travel expenses and accommodation based on actual costs, and per diem according to government rates.

The company does not provide company cars. However, the CEO has a fixed car allowance agreement. Furthermore, for pre-agreed use of a personal vehicle for business purposes, the company provides reimbursement based on government rates.

In special cases, and by agreement, the company may provide compensation to employees who commute weekly over a certain distance between their primary residence and a second residence near the workplace in Skøyen. The agreement covers travel between the primary residence and the second residence at the workplace, along with some living expenses in accordance with laws and regulations.

## **Changes and deviations**

The Board is responsible for developing guidelines. When there are changes to the guidelines, significant alterations must be described and explained within the guidelines. Any "significant change" in the guidelines requires consideration and approval by the General Assembly.

In cases where special circumstances necessitate deviating from the guidelines to safeguard the company's long-term interests and financial viability or ensure the company's viability, the Board and the CEO may deviate from these guidelines. Any such deviation must be approved by the Board and explained in the salary report for the current fiscal year.
# Report on salary and other compensation for executive personnel

According to section 6-16B of the Norwegian Public Limited Companies Act, the Board is required to prepare an executive remuneration report that discloses the salaries and other compensation of senior executives. This report ensures transparency about Space Norway AS's guidelines for compensation and confirms compliance through the reporting of actual pay and benefits to senior executives. Guidelines for pay and other compensation are available on the company's website.



# Salary report

# 2022

| Salary 2022                        | Total reported remuneration | Salary        |
|------------------------------------|-----------------------------|---------------|
| Chairman of the Board              | 350 000 NOK                 | 350 000 NOK   |
| Board member                       | 180 000 NOK                 | 180 000 NOK   |
| CEO                                | 1 693 226 NOK               | 1 633 028 NOK |
| CFO and director of administration | 1 368 130 NOK               | 1 354 063 NOK |
| CSO and director infrastructure    | 1 308 273 NOK               | 1 295 715 NOK |

|                                    | Other remuneration | Pension<br>premium | Paid pension<br>(not reported) |
|------------------------------------|--------------------|--------------------|--------------------------------|
| Chairman of the Board              |                    |                    |                                |
| Board member                       |                    |                    |                                |
| CEO                                | 60 000             | 198                | 110 585                        |
| CFO and director of administration | 1 474              | 12 593             | 110 585                        |
| CSO and director infrastructure    | Pendleravtale      | 12 558             | 110 585                        |

# 2021

| Salary 2021                        | Salary and remuneration | Pension premium | Loan | Note |
|------------------------------------|-------------------------|-----------------|------|------|
| Chairman of the Board              | 309 000 NOK             | 0               | 0    |      |
| CEO                                | 1 576 499 NOK           | 98 640          | 0    |      |
| CSO and director<br>infrastructure | 1 245 799 NOK           | 96 870          | 0    |      |
| CFO and director of administration | 1 307 905 NOK           | 94 961          | 0    |      |

executive directors, the last two years

Total fee to the Board of directors in 2022 845 250 NOK

# The tables above show salary and renumeration from Space Norway to

# **Development of salary last 5 years**

| Development of salary per 31.12 each year | 2022          | %   | 2021          | %  | 2020          | %   | 2019          | %   | 2018          |
|---|---------------|-----|---------------|----|---------------|-----|---------------|-----|---------------|
| Chairman of the Board                     | 350 000 NOK   | 13% | 309 000 NOK   | 3% | 300 000 NOK   | 25% | 240 000 NOK   | 51% | 159 000 NOK   |
| Board member                              | 180 000 NOK   | 9%  | 165 000 NOK   | 3% | 160 000 NOK   | 14% | 140 000 NOK   | 47% | 95 000 NOK    |
| CEO                                       | 1 689 559 NOK | 7%  | 1 576 499 NOK | 2% | 1 541 808 NOK | 1%  | 1 519 023 NOK | 3%  | 1 471 921 NOK |
| CFO and director of administration        | 1 400 221 NOK | 7%  | 1 307 905 NOK | 2% | 1 279 125 NOK | 2%  | 1 260 221 NOK | 5%  | 1 201 765 NOK |
| CSO and director infrastructure           | 1 345 631 NOK | 8%  | 1 245 799 NOK | 2% | 1 218 386 NOK | 2%  | 1 200 380 NOK | 17% | 1 027 500 NOK |

# Company development in salary and other key figures last 5 years

|  | 2022            | 2021            | 2020            | 2019            | 2018           |
|--|-----------------|-----------------|-----------------|-----------------|----------------|
| Group net income   | 65 542 436 NOK  | 16 498 407 NOK  | 104 015 243 NOK | 109 674 626 NOK | 41 663 340 NOK |
| Group cost of personell  | 235 231 374 NOK | 181 328 632 NOK | 161 808 653 NOK | 138 647 074 NOK |                |
| Mother company with wholly owned daughter companies                                    | 62 959 874 NOK  | 55 857 163 NOK  | 45 577 836 NOK  | 30 726 075 NOK  | 24 748 188 NOK |
| Group number of employees 50% KSAT   | 196,75          | 170,25          | 151,5           | 133,5           |                |
| Number of employees mother and wholly owned daughter companies                         | 45,5            | 42,5            | 42              | 30              | 29             |
| Average cost of personell per group employee   | 1 195 585 NOK   | 1 065 073 NOK   | 1 068 044 NOK   | 1 038 555 NOK   |                |
| Average cost of personell per employee in mother and wholly owned daughter companies   | 1 383 733 NOK   | 1 314 286 NOK   | 1 085 187 NOK   | 1 024 203 NOK   | 853 386 NOK    |
| Average salary in mother and wholly owned daughter companies, group executives excempt | 889 661 NOK     | 890 726 NOK     | 819 660 NOK     | 691 892 NOK     | 759 613 NOK    |

The table shows salary and other remuneration executive level has received from Space Norway, general group development and company development over the last 5 years.

According to company policy the level salary shall be competitive but not leading. Total remuneration is in accordance with company policy and moderation has been expelled in the salary settlement.

## Statement from the Board of directors

The Board has adopted the salary report for the year 2022. The report has been conducted in accordance with the Norwegian Public Limited Liability Companies Act §6-16B. The salary report will be presented at the general assembly 26. June 2023.

# **Board of Directors, Space Norway**

Skøyen, 24.05.2023



Svein Olav Munkeby Chairman of the board



Siri Løvlund Board member



**Tore Olaf Rimmereid** Board member



Ann-Kari Heier Board member



Morten Haga Lunde Board member



Per Atle Våland Board member



Norsat TD to be launched in the spring of 2023.





The salary report shall, when relevant, provide information on:

- down by component.
- The proportion of fixed and variable compensation.
- been applied.
- the last five fiscal years.
- group of companies.
- should be described in such cases.

The total compensation received or accrued by the senior executive in their capacity as a senior executive during the fiscal year, broken

A description of how the total compensation aligns with the guidelines, including how the compensation contributes to the company's long-term performance and how performance criteria have

The annual changes in total compensation, the company's results, and the average salary in the company based on full-time equivalents of other employees in the company than senior executives for

Compensation received from companies within the same group or

Any exceptions to the decision-making process in determining guidelines as mentioned in section 4, first paragraph, number 5, or if the guidelines have been deviated from due to special circumstances as mentioned in section 4, fourth paragraph. The circumstances and which parts of the guidelines have been deviated from



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Telephone +47 45 40 40 63 Fax Internet www.kpmg.no Enterprise 935 174 627 MVA

Til generalforsamlingen i Space Norway AS

## Uavhengig revisors attestasjonsuttalelse om rapport om lønn og annen godtgjørelse til ledende personer

## Konklusjon

Vi har utført et attestasjonsoppdrag for å oppnå betryggende sikkerhet for at Space Norway AS s rapport om lønn og annen godtgjørelse til ledende personer (lønnsrapporten) for regnskapsåret som ble avsluttet 31. desember 2022, er utarbeidet i samsvar med allmennaksjeloven § 6-16b og tilhørende forskrift.

Etter vår mening er lønnsrapporten i det alt vesentlige utarbeidet i samsvar med allmennaksjeloven § 6-16b og tilhørende forskrift.

## Styrets ansvar

Styret er ansvarlig for utarbeidelsen av lønnsrapporten og for at den inneholder de opplysninger som kreves etter allmennaksjeloven § 6-16b og tilhørende forskrift. Styret har også ansvar for slik intern kontroll som det finner nødvendig for å utarbeide en lønnsrapport som ikke inneholder vesentlig feilinformasjon, hverken som følge av misligheter eller feil.

## Vår uavhengighet og kvalitetsstyring

Vi er uavhengige av selskapet slik det kreves i lov, forskrift og International Code of Ethics for Professional Accountants (inkludert internasjonale uavhengighetsstandarder) utstedt av the International Ethics Standards Board for Accountants (IESBA reglene), og vi har overholdt våre øvrige etiske forpliktelser i samsvar med disse kravene. Vi anvender internasjonal standard for kvalitetsstyring (ISQM) 1 Kvalitetsstyring for revisjonsforetak som utfører revisjon og forenklet revisorkontroll av regnskaper samt andre attestasjonsoppdrag og beslektede tjenester, og opprettholder et omfattende system for kvalitetskontroll inkludert dokumenterte retningslinjer og prosedyrer vedrørende etterlevelse av etiske krav, faglige standarder og gjeldende lovmessige og regulatoriske krav.

### Revisors oppgaver og plikter

Vår oppgave er å gi uttrykk for en mening om lønnsrapporten inneholder de opplysninger som kreves etter allmennaksjeloven § 6-16b og tilhørende forskrift, og at opplysningene i lønnsrapporten ikke inneholder vesentlig feilinformasjon. Vi har utført vårt arbeid i samsvar med internasjonal attestasjonsstandard (ISAE) 3000 – «Attestasjonsoppdrag som ikke er revisjon eller forenklet revisorkontroll av historisk finansiell informasjon».

Vi har gjort oss kjent med retningslinjene om fastsettelse av lønn og godtgjørelse til ledende personer som er godkjent av generalforsamlingen. Våre handlinger omfattet opparbeidelse av en forståelse av den interne kontrollen som er relevant for utarbeidelse av lønnsrapporten for å utforme kontrollhandlinger som er hensiktsmessige etter omstendighetene, men ikke for å gi uttrykk for en mening om effektiviteten av selskapets interne kontroll. Videre utførte vi kontroller av fullstendigheten og nøyaktigheten av opplysningene i lønnsrapporten, herunder om den inneholder de opplysningene som kreves etter lov og tilhørende forskrift. Vi mener at innhentet bevis er tilstrekkelig og hensiktsmessig som grunnlag for vår konklusjon.

Oslo, 07. juni 2023 KPMG AS

Øivind Karlsen Statsautorisert revisor

| PMG AS, a Norwegian limited liability company and member firm of the KPMG network of independent member firms affiliated | Oslo    | Elverum      | Mo i Rana    | Stord     |
|--|---------|--------------|--------------|-----------|
| ith KPMG International Cooperative ("KPMG International"), a Swiss entity.   | Alta    | Finnsnes     | Molde        | Straume   |
|  | Arendal | Hamar        | Skien        | Tromsø    |
| tatsautoriserte revisorer - medlemmer av Den norske Revisorforening  | Bergen  | Haugesund    | Sandefjord   | Trondheim |
|  | Bodø    | Knarvik      | Sandnessjøen | Tynset    |
|  | Drammen | Kristiansand | Stavanger    | Ålesund   |

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## Øivind Karlsen

Partner Serial number: 9578-5997-4-377389 IP: 80.232.xxx.xxx 2023-06-07 07:19:27 UTC

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# Statement in accordance with the Transparency Act

115 Statement in accordance with the Transparency Act



## ↑ Foto: Chris Havard Berge

## Human rights and decent working conditions

Space Norway (SPN) as a group continuously strives to uphold fundamental human rights and decent working conditions. The group consists of Space Norway AS as the parent company and its wholly-owned subsidiaries Statsat AS (Statsat) and Space Norway HEOSAT AS (HEOSAT). As for the jointly-owned subsidiary Kongsberg Satellite Services AS (KSAT), reference is made to the company's own assessments.

Fundamental human rights are derived from various sources, including the UN Covenant on Economic, Social, and Cultural Rights from 1966, the UN Covenant on Civil and Political Rights from 1966, and the ILO's core conventions on fundamental rights and principles in the workplace. Decent working conditions refer to employment that upholds fundamental human rights, promotes health, safety, and environmental standards in the workplace, and provides a livable wage.

SPN endeavors to adhere to and respect all internationally recognized fundamental human rights and decent working conditions, including acting in accordance with the UN Guiding Principles on Business and Human Rights (UNGPs) and conducting due diligence assessments in accordance with the OECD Guidelines for Multinational Enterprises. SPN complies with the UN Global Compact's Ten Principles for Responsible Business.

SPN has developed its own procedures for ethics and corporate responsibility. These procedures are intended to ensure that both our employees and contracted personnel conduct themselves in a manner that respects fundamental human rights and ensures decent working conditions. The guidelines are readily accessible to all employees through the intranet portal.

Furthermore, SPN has formulated its own "Supplier Code of Conduct," which is meant to be included as a standard attachment in agreements entered into with our partners and suppliers. With this initiative, SPN aims to contribute to the assurance that our business partners and supply chain also play a central role in upholding respect for fundamental human rights and decent working conditions. Simultaneously, we expect that our business partners and supply chain share this commitment to respect these principles.

SPN will respond to inquiries about how we handle actual and potential adverse impacts on fundamental human rights and decent working conditions in accordance with the Transparency Act § 6. Inquiries and questions can be submitted through our website and to email: post@ spacenorway.no.

We will provide more detailed information on our efforts related to fundamental human rights and decent working conditions through an annual report. This is our first report, covering the year 2022.

## Due diligence

SPN places a strong emphasis on conducting due diligence assessments in accordance with the OECD Guidelines for Multinational Enterprises. These due diligence assessments apply not only to SPN's own operations but also to the activities it contributes to or is associated with through suppliers and subcontractors. SPN has conducted an assessment tailored to its existing operations concerning significance and risk. In this assessment, particular attention has been given to the severity and likelihood of adverse impacts on fundamental human rights and decent working conditions. SPN emphasizes that due diligence assessments should be conducted regularly as circumstances can change over time. These due diligence assessments cover not only SPN's own operations but also the activities of its subsidiaries.

## Suppliers

Our suppliers have been mapped based on their country of origin and the scale of our business with these companies in 2022.

|           | ١      | Norwegian           | Fo     | oreign            |  |
|-----------|--------|---------------------|--------|-------------------|--|
|           |        | Number with trading |        | Number with value |  |
| Suppliers | Number | value above 1 MNOK  | Number | above 1 MNOK      |  |
| Mother    | 178    | 22                  | 17     | 5                 |  |
| Statsat   | 30     | 3                   | 1      | 0                 |  |
| HEOSAT    | 27     | 4                   | 10     | 8                 |  |

In SPN, as the parent company, we primarily have Norwegian suppliers. Among foreign suppliers, there is one significant supplier closely linked to the MicroSAR program.

Statsat, with a few exceptions, also relies on Norwegian suppliers.

HEOSAT has significant foreign suppliers.

All Norwegian suppliers are subject to the same laws and regulations as we are, so in this report, we have focused on the foreign suppliers and their adherence to human rights and decent working conditions. In general, our foreign suppliers and partners are mostly large international companies. The three largest companies have been specifically assessed, and based on the information available on their websites, it is our perception that these companies take human rights and decent working conditions seriously and have established robust procedures to address these issues.

**Northrop Grumman**, which is a large American company supplying the satellites for the ASMB-programme, states this on their website:

"Northrop Grumman is committed to maintaining a strong culture with a deep respect for individuals and human rights. We have adopted company policies, practices and procedures to reflect and implement this broad commitment. The Human Rights Working Group, senior management and our Board of Directors provide oversight to enhance further this Policy and the Company's commitment to human rights.

Human rights are generally defined as the basic freedoms believed to be inherent to all people. They are outlined in the Universal Declaration for Human Rights. Space Norway <u>The Universal Declaration</u> focuses on dignity, respect and equality, without discrimination. These are principles that lie at the core of our Company's values. We are committed to treating all of our stakeholders – including our employees, customers, shareholders and suppliers, and the communities in which we operate – with dignity, respect and equality, and also to partnering with our stakeholders to help them to do the same. Although governments have the primary duty to provide and protect human rights, companies share a responsibility to act in ways that support them. The U.N. Guiding Principles for Business and Human Rights, adopted by the U.N. in 2011, offers a source of guidance on how governments, companies, and other parties can address their responsibilities. Companies can advance human rights through the culture they establish, how they treat their employees and other stakeholders, how they manage their operations and engage in trade, and with the contributions they make to the global communities where they live, work and serve. Northrop Grumman's commitment to human rights is reflected in each of these areas."

SpaceX, which is also a major American company and has entered into a contract with HEOSAT for the launch of satellites, states the following on its website:

«We are an equal opportunity employer offering competitive salaries, comprehensive health benefits and equity packages.»

SSTL, a major English satellite manufacturer and supplier of the satellite in the MicroSAR program, states the following on its website:

«SSTL has policies and processes that support our commitment to identify slavery risks and take the necessary preventative steps to ensure there continues to be no known slavery or human trafficking in our own operations or supply chain as follows:

Employee Code of Conduct - we fully endorse the principles of the Airbus Employee Code of Conduct which, for the purposes of this Statement, gives clear and comprehensive instruction to all employees in respect of protecting human rights and maintaining positive and healthy labour relations. It is available to our staff on our Intranet site and it is part of our new starter Compliance induction. New revisions feature on our internal news carousel.

- plier" On-boarding / Re-evaluation Assessments.
- at SSTL.
- team, the Compliance Officer or the Managing Director.

The Airbus Supplier Code of Conduct is also embedded within our own standard contractual terms. Prospective and existing suppliers are also required to confirm their understanding and acceptance of the Airbus Supplier Code of Conduct during their 'Know Your Sup-

The Compliance Block List is a formal listing of individuals or companies who are to be blocked in all ERP systems and are to have no dealings with Airbus under any circumstances. This includes suspected or actual ethical conduct risks such as modern slavery as described in the Airbus SE Modern Slavery Statement 2021. It is maintained by the Ethics and Compliance, Procurement and Finance teams at Airbus and is applied across Airbus and its main subsidiaries, including SSTL. The Compliance Block List is an integral part of the 'Know Your Supplier' supplier approval process

Whistleblowing Policy – we continue to encourage all our new starters, employees, workers, customers, suppliers and other business partners to report any concerns related to the activities of SSTL or our supply chain. This includes any circumstances that may give rise to the risk of slavery or human trafficking. Our Whistleblowing policy is designed to make it easy for all parties to make disclosures without fear of retaliation. Employees, customers or others who have concerns can contact any member of the SSTL leadership

They may also make use of the "OpenLine" system put in place by our shareholder, Airbus either by telephone on 0800 27 00 00 07 or through the OpenLine website: www.airbusopenline.com»

## Customers

SPN has also conducted a similar review and classification of the group's customers in 2022:

|           | 1      | Norwegian                              | F      | Foreign                                |
|-----------|--------|--|--------|--|
| Customers | Number | Number with trading value above 1 MNOK | Number | Number with trading value above 1 MNOK |
| Mother    | 10     | 4                                      | 2      | 0                                      |
| Statsat   | 3      | 1                                      | 1      | 1                                      |
| HEOSAT    | 1      | 1                                      | 1      | 1                                      |

SPN, as the parent company, primarily has domestic customers, all of whom are subject to the same laws and regulations as ourselves, with only a few foreign customers.

Statsat has a few smaller foreign customers.

HEOSAT has one large foreign customer.

**Inmarsat**, a major English satellite operator, who, through ASBM is a customer of HEOSAT writes the following on their website:

«We rely on the knowhow, creativity and entrepreneurial spirit of all our people. New and existing talent is attracted and retained by organisations that share insight and provide development opportunities within an inclusive culture. We recognise we need the best teams to be engaged and to collaborate if we are to achieve our purpose together. We recognise that our employees want to have a culture that fosters strong values and an environment of support for them as individuals and where we encourage our employees to bring their 'whole self to work'.

The Board engages with employees, principally through our Global Workforce Advisory Panel (GWAP) – a body set up in line with requirements outlined in the updated Financial Reporting Council's UK Corporate Governance Code. The GWAP is made up of 12 workforce representatives from across our global footprint, supported by additional 'Voice Champions' in smaller offices. The primary purpose of the group is to promote an effective two-way communications mechanism between the workforce and the management team, by capturing the views of our workforce on proposals and issues which affect our people, recognising barriers and enablers and helping to address them. The GWAP have been instrumental in developing our new flexible ways of working as we move to a new hybrid working model, and in engaging employees regarding some key changes to the way we work globally. They have also continued to provide invaluable feedback about workforce morale and wellbeing as we navigated the challenge of the pandemic and the gradual return to a more normal environment when and where circumstances permit. The GWAP promotes a culture of collaboration and high performance, and consults on and provides advice, support and feedback during the implementation of programmes and policies. We have formally consulted with other, local employee bodies in accordance with local requirements and best practice. In terms of wider employee

engagement programmes our CEO has oversight and delegated responsibility for all other activity through the Chief People Officer. Through the People Strategy, there is a proactive communications and engagement programme, supporting open and honest dialogue with the global workforce and formal employee representative bodies. Regular Board papers concerning employee engagement are prepared for the Board, and more frequently during the pandemic period.»

## In conclusion

SPN plans to conduct more comprehensive surveys of our foreign partners in the spring of 2023 and subsequently send out surveys to larger Norwegian business contacts. The conclusions from these surveys will be presented in next year's report.

The current report has been prepared based on the categorization of business partners and customers mentioned above, as well as the information provided by these entities on their own efforts in this area. Most of our customers and suppliers are Norwegian and, therefore, subject to the same laws and regulations as ourselves.

Based on a significance assessment, it is assumed that these matters are monitored by Norwegian authorities, and they take human rights and decent working conditions seriously. It is emphasized in this context that the majority of our Norwegian customers and partners are public authorities. Regarding foreign partners and customers, their nationality implies that they are subject to similar regulations concerning human rights and decent working conditions, and that there is at least as rigorous enforcement of such rules in their respective countries as there is in Norway. In our assessment, SPN has deemed it proportionate to only verify the policies stated by the largest of our partners in this area. These are large international companies, and based on what they disclose on their websites, it can be concluded that human rights and decent working conditions are topics of strong emphasis and taken very seriously.

SPN believes that, with this approach, we have conducted a satisfactory significance assessment for 2022, while we will continue to work on surveys and a more comprehensive assessment throughout the year for the purpose of next year's due diligence report.

# **Board of Directors, Space Norway**

Skøyen, 24.05.2023



Svein Olav Munkeby Chairman of the board



Siri Løvlund Board member



**Tore Olaf Rimmereid Board member** 



Ann-Kari Heier Board member



Morten Haga Lunde Board member



Per Atle Våland Board member



CEO





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