ALMOST 200 ANTENNAS IN 2019 – AND STILL GROWING.
PRESIDENT’S MESSAGE

One-stop shopping is easy. It simplifies logistics, cuts costs, and optimizes service deliveries. As described in one of the articles in this year’s annual report, it also applies to satellite systems. Traditionally, a satellite owner operates in separate verticals, one vertical for ground station data reception and control, and another for data analysis and information extraction. This separation is cumbersome and inefficient. In 2020, KSAT implemented the first integrated service combining scheduling, satellite control, data reception, image processing, and product delivery. The integrated one-stop shopping model allows the satellite owner to optimize product definition and reduce the cost of operation. In addition, it enables near real-time deliveries. It’s crucial when the focus is on dark target identification in the marine domain. In less than 20 minutes, the report needs to be delivered to the end users. As the prime service provider to the European Maritime Safety Agency, KSAT has developed and optimized its routines for this rapid service delivery. The information extracted, and the actionable timeframe for delivery, have become indispensable tools in the combat against illegal fisheries.

Dark ship detection and classification is a KSAT focal area. It is known that 25% of all fish caught are caught illegally. When there are no fish locally, there are no jobs for local fishermen, and thus no food for local people. In 2020, KSAT announced its commitment to participate in the fight against illegal fisheries. We will challenge the Norwegian Government to join us.

During 2019, the satellite arena has been enveloped in clouds. Cloud focus has been the mantra and the solution to all problems. Everything is supposed to happen in the cloud. Sometimes it’s impossible to see the path for the mist created in the cloud.

We have found that the cloud doesn’t solve all problems. Some problems are actually solved better closer to the antenna. To meet customer requirements, we have expanded our ground station as a service network, and integrated it with on-site processing and data analysis. After the near real-time requirements are met, the information is made ready for the cloud. By supporting near real-time rapid data extraction, as well as enabling high-powered processing and long-term storage, KSAT creates a hybrid solution using the best of two worlds.

In 2019 we inaugurated two new ground stations. New Zealand and Greece, in addition to the upgrades and expansions of existing stations. More than 31 antennas were installed, bringing the grand total to almost 200 at 23 different locations. Again unprecedented. And necessary for KSAT service development. The Greek station serves two purposes; it supports near real-time data reception in the Mediterranean region (which is super important for ship detection and classification), as well as it hosts the site for our first optical ground station.

KSAT has always aimed to be at the forefront of technology. Our clear goal is to become technology agnostics. From a common user interface, we’ll provide services on RF, optical and even LEO-GEO links. Our task is to commoditize satellite communication, permitting a satellite owner to focus on its satellites and the utilization of the data collected.

An estimated 900 satellites are planned to be launched annually from now until 2028. I don’t believe this number. However, I do believe that the number will increase significantly from today and that satellite operation must be modernized. KSAT is a front runner in this drive toward modernization, and will continue to be so.

I’m pleased to report that KSAT continues to develop positively. A staff of over 210 dedicated people focuses on the development and delivery of our services. We are actively searching for new opportunities and improving ongoing operations. We recently supported a launch with more than 30 satellites. All of them were checked out within a couple of hours. This was to be expected since we supported 36 LEOP’s successfully in 2018. It’s a challenge, even with a computer doing the job. The Machine-to-Machine (M2M) interface handled it, but in my opinion, experienced humans will still be in the loop for a long time. Traffic on our global network is continuously increasing. 40 000 passes per month was the 2019 average, now in 2020 it’s already well beyond 50 000. We don’t know where it will end or what the final numbers will be, but I can assure you that we’ll be there.

One-stop shopping is available through the KSAT™ integrated network of ground stations, optimized local cloud solutions, and generic interfaces to a cloudy world. Having solved an important challenge associated with services for LEO satellites, it’s time to move on.

We’ll follow Pink Floyd; next time we’ll focus on the Moon and beyond.

ROLF SKATTEBOE
President

There is no dark side of the moon really. Matter of fact it’s all dark out there.

FROM THE DARK SIDE OF THE MOON
PINK FLOYD
GROUND STATION OPERATION:

INCREASINGLY AUTOMATED & SPECIALIZED
The number of satellites in orbit is increasing – recent studies suggest that more than 900 satellites will be launched each year between 2020 and 2028. This includes not only Earth Observation constellations, but also numerous Internet of Things (IoT) constellations, unique science missions, and myriad other smallsat-based applications.

Despite this mission diversity, there is a common denominator: all satellites must communicate with the ground at least once a while. This means that the global connectivity and data backhaul KSAT provides are increasingly important.

To support the increased number of satellites and the requirements from satellite owners, Kongsberg Satellite Services (KSAT) has brought ground station services to the next level. It is no longer one satellite accessed by one antenna at one location: the KSATLITE as the common denominator: all satellites must communicate with the mission, and the end use, while KSAT provides the connectivity. KSAT has taken a different approach. By focusing on several satellites supported by the common technological and operational experience.

The value chain associated with satellite manufacturing, launch, and operations has been reassessed in recent market studies, and a typical representation is displayed in Figure 1. It shows significant growth and a Compound Annual Growth Rate (CAGR) of 10–15% for satellite operations and related services. For satellite manufacturing the comparable numbers are 18–43%. Therefore, it’s tempting to grasp as much as you can in the value chain. KSAT has taken a different approach.

Today’s industry focus lies with integrating infrastructure elements (satellite operations) with value added services. In recent months, the focus on cloud storage and cloud computing have increased dramatically. Getting data into the cloud as fast as possible has been prioritized. At KSAT, we do not see this as the answer to all problems: providing near real-time services, where information must be extracted and delivered to the end user in less than 10 minutes, is not possible in a distributed all-cloud environment. Actually, critical processes have to be moved closer to the data instead of sending the data to the process. KSAT has elected to execute ship detection algorithms at the foot of the antenna itself. One could argue that ideally such algorithms would be performed onboard the satellite, but for practical reasons, ground-based processing and analysis is easier and more cost-effective. Over the last 12 months, KSAT has implemented the new integrated approach to several satellites supported by the company’s global network of ground stations.

The latest addition is a ground station located near Athens in Greece. Its two-antenna configuration is designed to optimize data reception and analysis of radar data for ship detection. The products will be delivered to the European Maritime Safety Agency (EMSA), which will ease its operation and monitoring efforts for the inner Mediterranean Sea.

Serving all the satellites in orbit is not an easy task. Reliability, proficiency, and prudent priority are key parameters becoming increasingly important. KSAT has renewed its ground network operation, with Ground Stations as-a-service being refined and empowered with new technologies. Antennas to communicate with satellites are straightforward; integrated ground stations as-a-service such as KSAT provides, require unique expertise to execute well.
FINDING THE DARK VESSELS

In the vast ocean expanse, even the largest vessels are small. Satellites are an obvious and efficient tool for ocean monitoring and control – helping to find distressed vessels desperate to be found; and those who wish to hide.

© Flavio Giapponi
Kongsberg Satellite Services (KSAT) has been pushing the capabilities of satellite-based vessel detection in recent months, bringing optical sensors into the mix and exploring machine learning and artificial intelligence inspired techniques which have shown great promise in increasing both the efficiency and the accuracy of our services.

Estimated loss in annual economic impact due to the diversion of fish from the legitimate trade system is $26-50 Billion (USD), while losses to countries’ tax revenues are between $2-4 Billion. A recent study* suggests that as much as 7.7 to 14.0 million metric tons per year of unreported catches may be diverted to illicit trade systems globally. In Asia, Africa, and South America, the estimated losses to legitimate trade are between $7.3-14 Billion per year in gross revenue, or around 82% of the global gross revenue loss to the legitimate trade system. KSAT is supporting the UN sustainable development goals, with a particular focus on SDG nr. 14 ‘Life Below Water’. To this end, KSAT assisted the patrol effort by providing satellite-based vessel detection services, allowing the patrol to monitor piece of Earth in history – with an unprecedented combination of satellites utilized (including Iceye, PAZ, TerraSAR-X, TanDEM-X, Sentinel-1, RADARSAT-2, WorldView 2, GeoEye, Spot 6, and three satellites in the COSMO-SkyMed constellation). Working primarily with very high resolution imagery, the KSAT team identified over 750 potential targets for the patrol to consider, ranging from small wooden pirogues to large cargo ships. These targets were correlated with AIS information and analysis to reveal historical behaviors and patterns, providing supplemental justification for inspection and helping to discriminate the legally licensed from those looking to avoid detection.

KSAT assisted the patrol effort by providing satellite-based vessel detection services, allowing the patrol to expand their awareness of activity in their exclusive economic zone. This effort included the delivery of 20 reports within the critical first 100 hours of the patrol, providing blanket coverage of vessel activity. The information was derived from a mixture of high-resolution synthetic aperture radar (SAR) and optical image, that were delivered in near real-time – as little as 45 minutes after satellite pass.

We believe this is likely to have been the most intensely monitored piece of Earth in history – with an unprecedented combination of satellites utilized (including Iceye, PAZ, TerraSAR-X, TanDEM-X, Sentinel-1, RADARSAT-2, WorldView 2, GeoEye, Spot 6, and three satellites in the COSMO-SkyMed constellation). Working primarily with very high resolution imagery, the KSAT team identified over 750 potential targets for the patrol to consider, ranging from small wooden pirogues to large cargo ships. These targets were correlated with AIS information and analysis to reveal historical behaviors and patterns, providing supplemental justification for inspection and helping to discriminate the legally licensed from those looking to avoid detection.

KSAT volunteered to provide vessel detection services and introduced the Gambian Department of Fisheries to the Sea Shepherd, who have been providing the use of civilian offshore patrol vessels to African coastal states to allow authorities to more proactively enforce fisheries regulations and conservation laws in their sovereign waters. An operational campaign was conducted in 2019, which led the Gambia Navy to arrest many vessels for a variety of fisheries violations.

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The Gambia is a small nation with a big burden. KSAT is proud to have played a role in helping to monitor their waters in 2019, which remain rich in biodiversity and an appealing target for neighboring fleets. As in many of the most highly-targeted regions, illegal fishing flourishes where offshore patrolling and enforcement is limited by scarce resources. Satellite monitoring can help make these patrols more efficient and effective, deterring those who look to poach foreign fish stocks without license.

2019 was also the year KSAT kick-started our machine learning efforts, investing in specialized hardware and hiring developers dedicated to automated Earth Observation solutions. The most difficult and important aspect of any machine learning initiative is the quality and volume of the training data used. This is an area of particular strength for KSAT, a decades-long global leader in the use of SAR imagery, with multi-mission training data ripe for such exploitation.

Our prototype model is able to detect vessels with impressive error rates (1 per 150,000 km²) in some modes, and we will soon expand into optical imagery and high-resolution SAR modes, aiming to more accurately determine the type and size of vessels around the world. We are excited about the promise of automated solutions as a strong compliment to our existing 24/7 operations and personnel.

* Illicit trade in marine fish catch and its effects on ecosystems and people worldwide, by U.R. Sumaila et.al., Science Advances (AAAS) 26 Feb 2020, Vol. 6, no. 9, eaaz3801, DOI: 10.1126/sciadv.aaz3801 (online at https://advances.sciencemag.org/content/6/9/eaaz3801)
JANUARY

Proud partner and contributor of the conference Arctic Frontiers in Tromsø, Norway

KSAT™ part of InSAR Norway. InSAR Norway is a national initiative aimed at monitoring and measurement of ground movements powered by Copernicus Sentinel-1 data. The Norwegian Ground Motion Service offers InSAR subsidence data at full resolution, freely and openly available to the general public.

KSAT total: 34622 passes in January

APRIL

TESAT, KSAT and GomSpace have partnered up to introduce full optical communication capability for new innovative small satellite missions and space-based services

Official inauguration of the KSAT satellite ground station Punta Arenas performed by Their Majesties The King and Queen of Norway

KSAT stand and reception at Space Symposium, Colorado Springs

KSAT receives full operational license for Inuvik Ground Station, Canada

KSAT stand and presentations at ESA Living Planet and Spillcon

MAY

KSAT joined Seraphim space camp

KSAT provided satellite images of toxic alga-bloom in Norway. A surge of algae killed close to 8 million salmon at Norwegian fish farms in just a few weeks, wiping out more than half of 2019 expected sales growth. KSAT provided satellite images to the involved, tracking if the algae would spread.

Signed contract with UK MCA together with Kongsberg Norcontrol

US senators visited the KSAT Svalbard ground station

Iridium is operational in Punta Arenas with 4 antennas.

The always popular annual Holmenkollen Relay

Open day at our Svalbard ground station. It is a very exciting and a popular day for the locals from Longyearbyen, learning what all these antennas up on the mountain actually do.

FEBRUARY

New antenna, TR 9, under construction at Troll, Antarctica

Smallsat Symposium, Mountain View and our annual Ant-Arctic-a party

All time high, 10,000 KSAT™ passes per month

Commencement of the weekly cross-country ski course at KSAT, with more than enough snow!

MARCH

New antenna – after 40 years of loyal service. Saying hello to something new means saying goodbye to something old and loved. After 40 years of loyal service, our workhorse – the one and only TG1 – had to be retired and has now been replaced with a new and modern antenna to serve our customers from Tromsø Ground Station

JUNE

NASA selects KSAT Punta Arenas Station and Svalbard for Ka-band support for the NiSAR and PACE program.

Company sport is popular at KSAT, and the weekly run in the summer season is no exception.

Having seen reports of an incident involving Norwegian tanker “Front Altair” off the coast of Oman, KSAT drew on its multi-satellite constellation to get the first available satellite image of the stricken vessel.
JULY
KSAT selected by Space Norway to provide ground station services to the new Highly Elliptical Satellites (HEO) designed to provide satellite-based broadband in the Arctic. KSAT will as part of the agreement, establish a Satellite Operation Centre for satellite operation and control.
Start for ESA Copernicus/Sentinel operations in Inuvik, Canada
39193 satellite contacts in July

AUGUST
KSAT supported historic voyage to the North Pole. The Norwegian Coast Guard vessel KV Svalbard became the first Norwegian ship to reach the North Pole. Satellite imagery from KSAT was used as decision support to find the best route through the ice
The 24th KSAT ground station officially opened in Greece
Small Satellite, Utah. As a part of our sponsorship at this conference, we are also a proud sponsor of Stokes Nature Center, which we always look forward to visit!
New KSAT US office in Denver, Colorado
ICEYE and KSAT have signed an extended cooperation agreement to provide Near Real-Time radar satellite imagery and data analysis at high speeds to customers.
For the 3rd year, KSAT sponsored the cycling Race, “Arctic Race of Norway,” which takes place in the beautiful North.
It is not all about sport for the KSAT staff. The annual music and art festival “Rakettnatt” in the centre of Tromsø city always gathers many people, and with our own preparty at KSAT HQ.

SEPTEMBER
Our biennial Tenant meeting at Svalbard with over 70 participants was a success.
Annual gathering, internal seminar at beautiful Sommarøya
KSAT presents at the annual Career fair for students at the Arctic University of Norway in Tromsø
KSAT supports Girl tech Tromsø
Green solutions: Evaluating solar cells for Svalbard and Troll in Antarctica.
Illegal fisheries campaign in Gambia together with Sea Shepherd and Gambian Coastal authorities.
Rocket Lab partners with KSAT for Electron and Photon ground station support
KSAT employees supported the Pink Ribbon Run 2019

OCTOBER
The European Space Agency has funded a demonstration project by StormGeo and KSAT in which the companies provide information on Arctic weather and sea ice to their clients using advanced satellite-mounted radar technology, known as synthetic aperture radar or SAR.
The combined offering from KSAT and StormGeo will answer the increasing demand for risk management in the Arctic from several industries, including oil exploration, natural gas development, shipping, and cruise traffic.
Satellite Innovation, Mountain View
Our Ocean 2019: Chile and KSAT announced joint commitment to effectively support the Chilean effort to counter IUU fishing and management of Chilean Marine Protected parks
KSAT participated at the RECSO EnviroSpill 2019 in Abu Dhabi. Sales Director Rob Ayasse held a talk on the benefits of using satellite data for effective oil spill and vessel monitoring
KSAT, and Japanese Space Industry Start-up, Synspective, announced their global alliance

NOVEMBER
Gerardo, Martin, and Joachim participated at the career fair for students in Longyearbyen, Svalbard
Space Tech Expo, Bremen-Germany
APRSAF 2019 conference in Nagoya, Japan

DECEMBER
No less than 32 times this year KSAT has closely followed launch vehicles and satellites on their first orbits, ensuring reliable and frequent communication.
The successful launch of CHEOPS, ESA’s new and exciting mission to Characterize Exoplanets just about concludes yet another busy year for the specialized teams at KSAT performing launch and early orbit support.
Amazingly 40673 passes in December!
After more than 85 days expedition in the Arctic, the two polar explorers Børge Ousland and Mike Horn was not able to reach Svalbard as planned due to the constantly changing ice conditions. High resolution satellite images from KSAT was used to try to find a way around dangerous leads in the ice to bring them safely to the vessel Lance.
KSAT can look back on a year where 31 new antennas saw the light!
Our annual Christmas knuch makes a great ending for another eventful year.
In 2019, the net cash and cash equivalents of the company went up by MNOK 3.7. As at 31.12.2019, the company cash flow and liquidity were assessed as good, and the equity-to-assets ratio was 69%. The working capital of the company is a negative MNOK 18.6.

In 2019, the company employed 2,050 people, of which 1,539 were permanent employees. The employees have two representatives on the board. Company management comprises six men and one woman. The headquarters offices are arranged to support disabled people.

The company contributes to acquiring satellite-based earth observation data that is important for meteorology, resource management and monitoring in particular. KSAT cooperates on a consistent basis with most leading space agencies as well as to expand access to its own and other data sources as well as to expand access to its own and other data.

The parent company net cash and cash equivalents went up by MNOK 1,641. The causes of the growth include a sound, cost-effective infrastructure, combined with unique geographic locations. Moreover, the company draws upon 20 years of experience in developing and supplying satellite-based services focused on maritime applications.

Work continues to improve the accessibility of data. KSAT now is the world only company with internal processing capabilities for all operational radial satellite systems. KSAT seeks innovative solutions for establishing new services, focusing on the high North in general and on environments in particular. KSAT cooperates with UnoSat, the United Nations satellite agency, and contributes to the use of satellite data in disaster and emergency aid activities. KSAT has an active attitude of the UN Sustainable Development goals, in particular with follow-up of four goals: Innovation and infrastructure, Climate Action, Life Below Water, and Life on Land.

KSAT is a service provider that depends on operational satellites and services associated with operative use of these data. The company focuses especially on satellite applications. Company headquarters are in Tromsø. KSAT operates 24 ground stations in various countries. Operations are controlled at the Tromsø Network Operations Center (TNOC), which is affiliated with company headquarters. KSAT has local offices in Svabrd, Oslo, Stockholm, and Denver. During the year, the KSAT staff expanded by 28 to 208 at the end of 2019. KSAT is owned by Space Norway AS, a State-owned enterprise (SOE) of the Ministry of Trade, Industry, and Fisheries, and is part of Kongsberg Defence & Aerospace AS (KDA), part of the Kongsberg Group ASA.

INNOVATIVE IMPROVEMENTS AND ESTABLISHING NEW BUSINESS SEGMENTS.

KSAT is the world’s largest supplier of services for controlling and acquiring data from polar-orbit satellites. Antenna capacity went up in 2019, and by the end of the year, the company operated 200 antennas and conducted 50,000 satellite contacts per month. KSAT supports space data services to the ESA/ EU-funded Galileo and Copernicus satellite systems. Some 93% of the company turnover is outside Norway. Initiatives in the small satellite market have achieved good results. KSAT routinely delivers operative, near real-time maritime products relevant for maritime applications.

KSAT is engaged in attaining the UN Sustainable Development goals, in particular with follow-up of four goals: Innovation and infrastructure, Climate Action, Life Below Water, and Life on Land.

RESEARCH AND DEVELOPMENT

Nearly 5% of annual turnover is invested in internally and externally financed development of services. The relevant costs are expensed as incurred.

FUTURE DEVELOPMENT

Demand for KSAT services is good, and growth is anticipated in all business sectors. KSAT aims to secure existing and new data sources as well as to expand access to its own and other ground stations. The Board anticipates continued KSAT growth. Focus will be on diversifying activities, globalizing services, and supporting maritime monitoring in the high north. Competition is increasingly keen, and there’s a price pressure in the market.

WORKING ENVIRONMENT

In 2019, the Working Environment Committee (AMU) held two meetings, of which 12 attended. AMU is composed of representatives of daytime workers and of shift workers in Tromsø and on Svalbard. It has 3 representatives from management and 27 employees, of which 1 represents an ethnic minority.

In 2019, the AMU in KSAT deems the working environment to be safe, sound, and ensured. Two workplace accidents with minor personal injuries were registered in 2019, neither of which resulted in sick leave. Sick leave amounted to 2.5%, of which 1.2% was short-term and 1.3% long-term, reductions from previous years.

SOCIAL RESPONSIBILITY

KSAT is engaged in attaining the UN Sustainable Development goals, an incentive that shall reflect upon KSAT as a responsible company with a respectful workplace that focuses on human rights, social responsibility, environmental protection, and technological innovation. KSAT emphasizes values and ethical guidelines that shall be integral throughout its activities. The staff and collaborative partners shall have high ethical standards. The company focuses on anti-corruption and is concerned with its social responsibility. The company consistently strives to adhere to relevant laws and regulations in all its activity sectors. The company contributes to acquiring satellite-based earth observation data that is important for meteorology, resource monitoring, and climate research in general.

GENDER EQUALITY

Company management comprises six men and one woman. The Board and its deputies consist of three female and seven male members. The employees have two representatives on the Board. The Board and management are aware of the expectations

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GENDER EQUALITY

Company management comprises six men and one woman. The Board and its deputies consist of three female and seven male members. The employees have two representatives on the Board. The Board and management are aware of the expectations for fostering gender equality within the company and on the Board. The company wishes to be seen as an attractive workplace and hence aim for arrangements that increase the proportion of women in technical positions as well as within management. In 2019, 32% of KSAT employees were women.

MEASURES AGAINST DISCRIMINATION

The KSAT personnel policy aims to ensure equal possibilities and rights and to hinder discrimination on the basis of ethnic background, national origin, sexual preference, skin color, language, religion, beliefs, age, or gender. The headquarters offices are arranged to support disabled people.

EXTERNAL ENVIRONMENT

The company now is working on alternative green solutions for energy, particularly at stations in Svalbard and at Troll. These are the principal places where company environmental impact may be reduced.

STATEMENT OF ACCOUNTS

The Board believes that the Annual Accounts satisfactorily describe the company position at the end of the year. The company financial position and liquidity are sound, and the Board assesses the company equity to be satisfactory. The Board is unaware of any situations not included in the Annual Accounts that may affect appraisal of company position.

ALLOCATION OF PROFIT IN THE PARENT COMPANY

In 2019, the company profit after tax was 238,478 TNOK (Thousand Norwegian Kroner). The parent company result 2019 shown an after-tax profit of TNOK 226,464.

The Board recommends the following allocation of profit for KSAT AS:

THNOK

Dividend to owners............................................110,000
To other equity..................................................116,464
Total allocation of profit......................................226,464

Tromsø, 31 December 2019

13 February 2020

THE BOARD OF DIRECTORS OF KONGSBERG SATELLITE SERVICES AS

Erik Lie
Chairperson
Asbjørn Birkeland
Deputy chairperson
Even Aas
Board Member
Jostein Ranneberg
Board Member
Vidar Tyldum
Board Member
Gøran Bjørkmo
Board Member
Rolf Skatteboe
President

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ANNUAL REPORT 2019

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ANNUAL REPORT 2019
### Income Statement 1 January–31 December

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
<th>2019</th>
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<tr>
<td>Operating revenue</td>
<td>105,654</td>
<td>106,564</td>
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<td>Raw materials and consumables</td>
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<td>Personnel expenses</td>
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<td>20,557</td>
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<td>Other operating expenses</td>
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<td>Depreciations</td>
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<td>24,288</td>
<td>24,288</td>
<td>24,288</td>
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<tr>
<td>Operating profit</td>
<td>279,679</td>
<td>265,447</td>
<td>279,679</td>
<td>265,447</td>
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<tr>
<td>Earnings before tax</td>
<td>279,679</td>
<td>265,447</td>
<td>279,679</td>
<td>265,447</td>
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<tr>
<td>Taxes paid</td>
<td>50,566</td>
<td>45,716</td>
<td>50,566</td>
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<tr>
<td>Profit/loss sale of fixed assets</td>
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<tr>
<td>Depreciation and amortisation</td>
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<td>9,929</td>
<td>12,207</td>
<td>9,929</td>
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<td>Change in accounts payable/receivables</td>
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<td>(4,088)</td>
<td>6,348</td>
<td>(4,088)</td>
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<tr>
<td>Change in pension plan liabilities</td>
<td>(2,070)</td>
<td>(668)</td>
<td>(2,36)</td>
<td>(76)</td>
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<tr>
<td>Change in other accrual items</td>
<td>1,259</td>
<td>3,460</td>
<td>1,259</td>
<td>3,460</td>
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<tr>
<td>Net cash flow from operations</td>
<td>401,016</td>
<td>302,321</td>
<td>401,016</td>
<td>302,321</td>
</tr>
<tr>
<td>Sale of tangible fixed assets</td>
<td>31,853</td>
<td>30,261</td>
<td>31,853</td>
<td>30,261</td>
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<tr>
<td>Payments for acquisition of fixed assets</td>
<td>5,759</td>
<td>(5,207)</td>
<td>5,759</td>
<td>(5,207)</td>
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<tr>
<td>Loan to Group Company</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Paid dividend</td>
<td>(12,528)</td>
<td>(12,528)</td>
<td>(12,528)</td>
<td>(12,528)</td>
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<tr>
<td>Cash and cash equivalents</td>
<td>8,154</td>
<td>8,154</td>
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</tr>
</tbody>
</table>

### Statement of Cash Flow

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
</tr>
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<tr>
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<tr>
<td>Taxes paid</td>
<td>50,566</td>
<td>45,716</td>
</tr>
<tr>
<td>Profit/loss sale of fixed assets</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Depreciation and amortisation</td>
<td>12,207</td>
<td>9,929</td>
</tr>
<tr>
<td>Change in accounts payable/receivables</td>
<td>6,348</td>
<td>(4,088)</td>
</tr>
<tr>
<td>Change in pension plan liabilities</td>
<td>(2,070)</td>
<td>(668)</td>
</tr>
<tr>
<td>Change in other accrual items</td>
<td>1,259</td>
<td>3,460</td>
</tr>
<tr>
<td>Net cash flow from operations</td>
<td>401,016</td>
<td>302,321</td>
</tr>
<tr>
<td>Sale of tangible fixed assets</td>
<td>31,853</td>
<td>30,261</td>
</tr>
<tr>
<td>Payments for acquisition of fixed assets</td>
<td>5,759</td>
<td>(5,207)</td>
</tr>
<tr>
<td>Loan to Group Company</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Paid dividend</td>
<td>(12,528)</td>
<td>(12,528)</td>
</tr>
<tr>
<td>Cash and cash equivalents</td>
<td>8,154</td>
<td>8,154</td>
</tr>
</tbody>
</table>

### Balance Sheet at 31 December

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equity and Liabilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Share capital</td>
<td>2,000</td>
<td>2,000</td>
</tr>
<tr>
<td>Other equity</td>
<td>89,411</td>
<td>89,411</td>
</tr>
<tr>
<td>Total equity</td>
<td>91,411</td>
<td>91,411</td>
</tr>
<tr>
<td>Other long-term liabilities</td>
<td>3,623</td>
<td>3,623</td>
</tr>
<tr>
<td>Other short term liabilities</td>
<td>38,259</td>
<td>38,259</td>
</tr>
<tr>
<td>Total liabilities</td>
<td>42,182</td>
<td>42,182</td>
</tr>
<tr>
<td>Total equity and liabilities</td>
<td>131,521</td>
<td>131,521</td>
</tr>
</tbody>
</table>

### Key Figures

#### Revenue Geographical Distribution 2019
- United States: 48%
- Europe: 32%
- Asia: 13%
- Norway: 6%

#### Revenue Distribution Business Areas 2019
- Ground Station: 87%
- Services: 12%
- Earth Observation: 1%

#### Employees by Level of Education 2019
- Bachelor: 55%
- Master of Science: 40%
- Others: 5%
- PhD: 5%

#### Shareholders 31 December 2019
- Kongsberg Defence and Aerospace AS: 50%
- Space Norway AS: 50%