
2020
ANNUAL REPORT
KSAT
KONGSBERG
KONGSBERG SATELLITE SERVICES

President's message

THE YEAR 2020 WAS SPECIAL. I concede that right off the bat. COVID-19 brought in a new state of mind, a New Normal. It's not a better one, just a different one. It will change us, but I don't think it will transform us. I am pleased that KSAT made it through 2020 with no major impacts on our operations and deliveries. Thanks to the dedication of our staff combined with a strong focus on infection prevention and control, there were no disruptions in our operations due to covid.

After a dip in the launch market in March and April, the launch service providers came back strong. One result was that KSAT supported more LEOPs in 2020 than ever before. The V-shaped return to market is fueled by a wish to get satellites into orbit. Recent studies show that more than 10,000 satellites are scheduled to be launched in the coming decade. This clearly shows the growing interest in more affordable space systems.

KSAT continues to innovate to meet the challenges of tomorrow. We're taking the key success factors from KSATlite and applying them to KSATmax. This results in an uniform platform that can be implemented on all our ground stations with a common, standard interface. At the same time, we've maintained integrated operations with high reliability space to ground communications every day. Ground Stations as a-service has never been easier.

The KSAT global ground network is continuously expanding, and we are now adding KSAT antenna installations in Maspalomas, Spain and in western Australia to our map. They are all part of a common interfaced system design to optimize performance. A new record of about 50,000 satellite contacts are channeled through this network every month.

I'm particularly pleased that the global green footprint of KSAT's services is growing. Since the 1990s we have used satellite imagery as a baseline for oil spill detection services for preparedness and response. Shortly thereafter, we expanded it to ship detection enhanced with machine learning techniques, used to expose illegal fisheries. Now we are supporting the Norwegian International Forest and Climate Initiative (NICFI) with monthly mosaics of the worlds' tropical forests in order to help reduce and reverse the loss of tropical forests, combat climate change, conserve biodiversity, and facilitate sustainable development. By providing open and free access to high resolution satellite data, the Norwegian Ministry of Climate and Environment is paving the way for new services that contribute to saving the planet.

The entire KSAT organization is gearing up for the next decade. It will be different, it will be more flexible, and it will be more diversified.

The cloud is here to stay. Various technologies for satellite communication will emerge. There will be more of everything. To take a philosophical view, one might ask if our industry is turning itself into a software development outfit. My answer is no. In the 2018 Annual Report, I wrote about the Noble Art of Ground Station operation. It is still here, now more refined, specialized, and advanced. KSAT will continue to lead its development.

We have restructured into an organization fit for the future. Stronger than ever, we are ready for the next decade. We are learning, and we are innovating. We are growing and we are expanding into new areas.

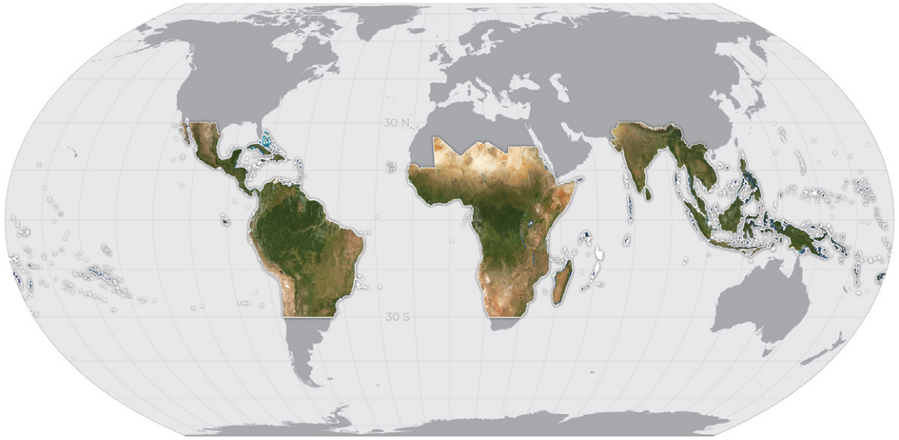
To quote the Norwegian Author Tor Åge Bringsværd: "The one who keeps both feet on the ground is standing still" (From the the 1974 novel *Den som har begge beina på bakken står stille*) by Tor Åge Bringsværd.

I can reassure you that at KSAT, we are running.

Rolf Skatteboe
President

Norway's International Climate and Forest Initiative (NICFI)

Tropical forests are vital for global climate and biodiversity but are disappearing at alarming rates. Free high-resolution satellite images of the tropics to help reduce deforestation are now made available through the NICFI program.



Global map showing the extent of monthly Planet Basemaps to be provided through the partnership for tropical forest monitoring. © 2020, Planet Labs Inc. All Rights Reserved.

Free satellite data has been instrumental in driving forward research across a wide range of applications. In fact, Landsat and Sentinel-2 are considered the most used satellite datasets for the assessment of forest and land changes worldwide.

Their resolution, coverage and cadence provide the opportunity for high repeat, regional scale analysis which has, to date, been useful for monitoring large areas. But what if you could improve reporting, monitor small changes and provide baseline data to support sustainable development and climate change mitigation goals using higher resolution satellite data?

This has not been possible before, principally due to cost and license restrictions. Hence, the Norwegian Ministry of Climate and Environment, through the International Climate and Forest Initiative (NICFI), funded the Global Tropical Forest Program initiative, which for the first time, enables users to access higher resolution data at <5m across global tropical forest regions without the typical constraints of cost and licensing.

After a tendering period of 15 months, in which KSAT worked with its partners the satellite operators Planet and Airbus, to build an offer that adjusts, refines, and redefines how users access satellite data in new ways. KSAT is the prime contractor for this consortium, for which the contract was awarded on 22nd September 2020 with durations up to four years.

“This will revolutionize global forest monitoring. Better insight into what is happening in the rainforests will enhance efforts to protect these priceless ecosystems”, said Sveinung Rotevatn, Norway’s Minister of Climate and Environment.

The program provides monthly and biennial Planet-scope mosaics from September 2020 on. Each mosaic covers 45 Million sq km of tropical forest between 30 degrees north and south. In addition, the program also provides historical archives as selected scenes from these regions using the Airbus’ SPOT archive back to 2002. This vast amount of data tipped the way data is offered, used and shared.

The ease of access to view, stream, download, and produce analytical products helped break down barriers previously met by scientists, researchers and analysts in using high-resolution satellite data.

KSAT is prime for the consortium and overall project leader for this program, however works closely with Planet and Airbus that are supplying the data. KSAT is up front for all questions on the program from the user community via an easy-to-access 24/7 support desk.

Moreover, a critical component of the program is outreach to ensure that as many users as possible know the program exists and that the barriers to access have been lowered. The barriers include language, level of understanding of satellite technology and bandwidth capacity to cope with the data. Hence, various access points have been designed to suit the needs of users that range from new users to advanced data analysts.

The program is designed to permit growth throughout its lifetime. KSAT and its partners have achieved this through interaction with various user communities. The joint effort to provide satellite based imagery to fight global deforestation is giving results. The worlds tropical rainforests can for the first time be monitored efficiently.

“This will revolutionize global forest monitoring. Better insight into what is happening in the rainforests will enhance efforts to protect these priceless ecosystems”

SVEINUNG ROTEVATN
NORWAY’S MINISTER OF CLIMATE AND ENVIRONMENT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Applying Deep Learning to Combat Maritime Crime and Increase Safety for Arctic Mariners

KSAT has long had a strong focus on ship detection in general and on illegal fishery in particular. Applying Machine Learning techniques now ensures faster analysis and more insight.

Illegal, unregulated, and unreported (IUU) fishing causes an estimated annual economic loss of USD 26–USD 50 billion due to illicit trading of unreported catches of 8 to 14 million metric tons.[1] Other nefarious maritime activities include illegal transshipment to circumvent international sanctions and various encroachments of state sovereignty. These actors typically disable or doctor the mandatory Automatic Identification System (AIS) messages. Therefore, Earth Observation imagery is essential to combating maritime crime, with KSAT playing a leading role historically and in the future.

Deep Learning (DL) has enabled new higher levels of image analysis automation for whoever has data of sufficient quality and quantity. When it comes to maritime monitoring using Synthetic Aperture Radar (SAR) imagery, KSAT has the world leading data archives, a key prerequisite for a good DL algorithm. KSAT has invested significant time and effort into creating and refining these archives into a formidable data warehouse, which we believe will be pivotal in unlocking the potential of machine learning (ML) at KSAT.

Our broad approach to DL automation includes all the SAR satellites in our arsenal, including high resolution modes. Our ambition is to tell our clients ever more about what's in their areas of interest, and DL is the key to eliciting more information about dark targets (vessels that for some reason do not emit AIS messages) including vessel type and size. But we don't limit ourselves to SAR vessel detection: We currently have pre-production DL prototypes for oil spill detection and both low- and high-resolution optical vessel detection.

In 2020 our ML effort blossomed. In the summer months, our pilot model for detecting objects at sea and discriminating icebergs from vessels helped The Norwegian Coastal Administration monitor the seas around Svalbard, where the combination of expeditionary cruises with thousands of passengers, icebergs, and limited rescue resources has been identified as high risk. That delivery embodied the frame of mind that "if we can do it here, we can do it anywhere", since monitoring is a notoriously difficult task within SAR maritime surveillance.

Hence, we are optimistic about our prospects of automating large parts of our services, both delivering human out-of-the-loop services and empowering our experts to deliver KSAT's manual analyses with increased speed and efficiency. Coupled with the availability of free data from the Copernicus Sentinel mission, we envision a near term future with distinct service levels, from copious free data with fully automated DL analysis, to high resolution imagery assessed by experts. And of course, continuing to push the limits when it comes to timeliness.

Implementing ML/DL models in a way which satisfies KSAT's commitment to quality and reliability means that "just" training a good model and putting it into production is insufficient. A full MLOps approach is needed, integrating data and ML models into the continuous integration and delivery cycles of the DevOps workflow. At the time of writing we have a double-digit number of ML models being phased into our production chain, relying on our top Earth Observation experts for assessment and MLOps best practices for reliability, stability, and scalability.

[1] https://advances.sciencemag.org/content/6/9/eaaz3801

Entering a new decade

The New Normal is the motto of the KSAT strategy plan for 2021 and onwards.

No one could have predicted the changes we have seen over the last 12 months. Travel was a part of our everyday life, interaction between colleagues was another. The word “Home office” was rarely used, and the consequences not understood at all. A mask were something you wore in a hospital, and hugging a friend was something to look forward to every day.

It is possible to live the New Normal, but it may be challenging. The personal interactions between KSAT staff as the service provider and our partners and customers has always been important and a Teams meeting cannot replace the human face-to-face dialogue. The new situation has shown the importance of system architecture and design. Without carefully designed solutions and autonomous operation life would have been different. KSAT has maintained 99.98% proficiency during the year, and we have not had any disruptions in the service delivery chain.

The Pandemic marked the end of a decade, or a beginning of a new one. The last 10 years have been interesting.

The development of the satellite industry has been tremendous. From a few dedicated bus-sized satellites, the small space revolution hit in 2010. Mega constellations have been designed and launched, and the flow of data is higher than ever. When Planet launched its first satellite, few could envisage what a constellation that size could do. When KSAT supported the first launch with 82 satellites, software had to be rewritten to provide individual call signs to each of them.

It was time to rethink operation as-a-service we had offered before and KSATlite was born. For the first time we allowed the ground station to be the driving factor with respect to space to ground requirements. The change dramatically reduced the cost of operation and allowed a transition from an antenna-centric view till a network centric view, as then all ground stations became equal, so if you could use one, you could use all.

The number of satellites also shifted for KSAT Earth Observation services. It’s not all about data anymore. The increasing number of satellites opened new areas of operation where information is the key parameter. Automated operation and analysis became focus of everybody’s interest. The traditional receive data from given pre-defined areas based on a pre-paid allocation, process it through dedicated processors and deliver an image to someone was replaced by cloud-based flexible solution with software defined receiving and processing chains that could be relocated in any local on-prem and the cloud became the new approach. Part of KSAT’s core activities moved from a RF-based to a SW based world.

Sad? Not necessarily. The improved agility is needed for the next decade.

As the number of satellites increases, the demand for information delivered reliably in near real-time is also increasing. Hence, the KSAT network of 25 ground stations with more than 200 antennas is geographically located to optimize near real-time communication between satellites and the ground. Though this is another area where much has changed over the last decade. It used to be size matters; a bigger antenna was a better antenna. Then it became higher frequencies i.e. Ka- versus x-band. KSAT is still the only company running an operational Ka-band service in which the leading meteorology organization NOAA and soon Eumetsat, will be supported.

Ten years ago, satellite operation and services based on Earth Observation data was a business based on legacy programs and traditional techniques. In the decade to come, it will be software-based solutions, flexible and agile systems with many more satellites.

KSAT has always focused on the future not the past. An interesting and rewarding decade is now history. The end has been more challenging than anticipated, and it prepared us for changing times. One thing for sure, the New Normal is here to stay.

Entering the HEO World

Communication in remote areas has always been important.

In unpopulated regions and in the vast ocean it has been especially challenging. Satellites have therefore become an indispensable tool. In the mid 1960, scientists in the Soviet Union discovered the Molniya orbit. It is a Highly Elliptical satellite Orbit (HEO) designed to provide communications and remote sensing coverage at high latitudes. Hence, the concept of HEO satellites for communication is not new.

The Norwegian government has recently had an increasing need for reliable communication in the vast ocean areas under Norwegian jurisdiction. Combined with a commercial demand for mobile access on trans-Atlantic flights opened for a joint public and private investment in a two-satellite system called the Arctic Broadband Satellite Mission (ASBM). Space Norway, a Norwegian company, is investing in the satellite system with the purpose of providing broadband to the Arctic.

The project is important for KSAT. For the first time, satellite-and mission control will take place from the KSAT headquarters in Tromsø. A dedicated 24/7 crew will ensure reliability, and the ops crew will be responsible for the daily operation of the satellite. They will also operate a dedicated set of antennas installed for this purpose. Even though automatic operation is increasingly prominent in various sectors of satellite and mission control, it is important to have operators on duty for certain missions.

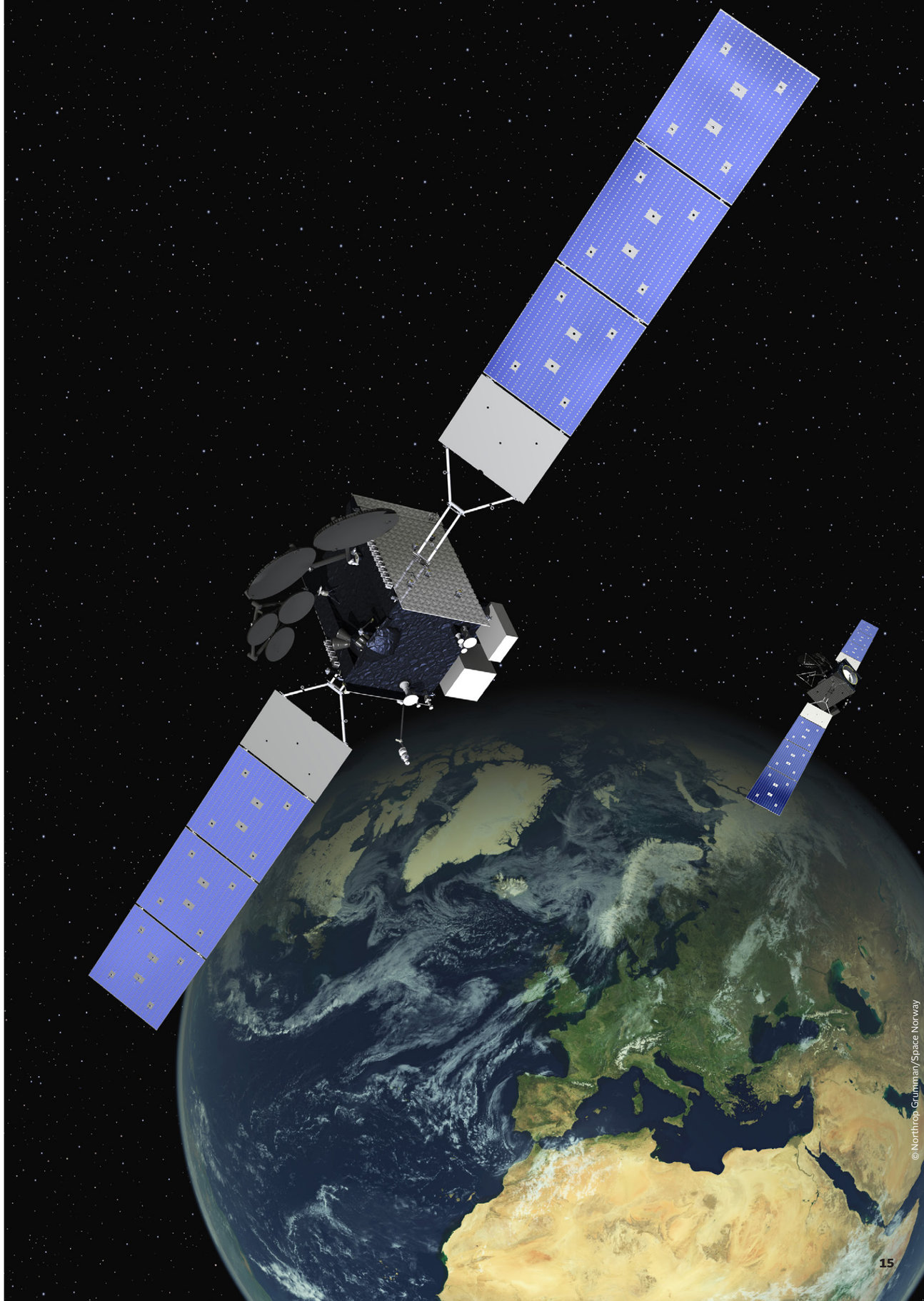
KSAT has provided satellite operation as-a-service for some 50 years. The Tromsø Network Operation Center (TNOC) now oversees more than 200 antennas via its 24/7 operation in Tromsø and on Svalbard. In February 2021, about 50,000 contacts were logged. However, providing satellite payload operation and mission control, is new for KSAT. The teams in Tromsø and on Svalbard have thus far focused on sending and receiving TT&C signals as well as reception and dissemination of payload data. In the new setup, the satellite itself will be controlled by KSAT.

In entering this new area of operation, KSAT elected to not duplicate the old world of satellites, but to learn from the new one, the Smallsat community. Integrated design, software-based solutions and API driven interfaces are being implemented as core part of the setup. KSAT is combining innovation and reliability and is creating next generation satellite and mission operation.

Satellite communication in general and KSAT ground station services augmented by a dedicated satellite operations center in particular, are new aspects of connecting Space and Earth. It's KSAT's vision, as evidenced by its entry into the HEO World.

A HIGHLY ELLIPTICAL ORBIT (HEO) is an elliptic orbit with high eccentricity, usually referring to one around Earth.

Such extremely elongated orbits have the advantage of long dwell times at a point in the sky during the approach to, and descent from, apogee. Bodies moving through the long apogee dwell appear to move slowly, and remain at high altitude over high-latitude ground locations for long periods of time. The Norwegian ASBM satellite will be placed in a TAP (three Apogee) orbit with apogee of 43 500 km and perigee of 8 100 km. The satellites will be in the same 63-degree plane with an 8-hour separation. Being active 10 hours per orbit, they will provide continuous coverage of the area above 65 degrees N.



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ANNUAL REPORT

ABOUT KSAT

Kongsberg Satellite Services AS (KSAT) supplies services for the operation of and acquisition of data from satellites, as well as for the applications of satellite-based information in global services. KSAT has four wholly owned subsidiaries, KSAT Global, CSGSI (Canadian Satellite Ground Station Inuvik), a Canadian company, CSGSP (Chilean Satellite Ground Station Punta Arenas), a Chilean company and KSAT Inc., a US company. In addition, KSAT has activities at fixed locations in several countries. Financial statement are consolidated numbers for the KSAT Group. KSAT Global owns the infrastructure at KSAT subsidiaries and external locations. KSAT is a world leader in its markets and has two business segments. Satellite Operations services (SOP) comprise about 87% of revenues, while services based on satellite information, Energy, Environment, and Security (EES), accounts for the remainder. KSAT activities comprise operation of ground stations for communication with satellites, reception and processing of Earth Observation data in near real-time, and services associated with operative use of these data. KSAT focuses especially on marine applications. KSAT headquarters is in Tromsø. KSAT operates 25 ground stations in various countries. Operations are controlled at the Tromsø Network Operations Center (TNOC), which is affiliated with group headquarters. KSAT has local offices in Svalbard, Oslo, Stockholm and Denver. During the year, the KSAT staff expanded by 50 to 236 at the end of 2020. KSAT is owned 50/50 by Space Norway AS, a State-owned enterprise (SOE) of the Ministry of Trade, Industries, and Fisheries, and by Kongsberg Defence & Aerospace AS (KDA), part of the Kongsberg Group ASA.

STATUS

KSAT is the world's largest supplier of services for controlling and acquiring data from polar orbit satellites. The year 2020 has been marked by the ongoing COVID-19 pandemic. KSAT operations has run without service disruption through the pandemic. With customers located worldwide, travel restrictions have affected the way we work. Increased use of virtual channels has given us good arenas for connecting with customers and partners. Travel restrictions have also been challenging for technical maintenance and establishing new capacity throughout our network. With new ways of working, KSAT has continued to build new capabilities and execute planned maintenance through 2020, despite the challenging situation. Antenna capacity increased in 2020, and by the end of the year, KSAT operated around 200 antennas and conducted 50,000 satellite contacts per month. KSAT supplies ground station services to the ESA/EU funded Galileo and Copernicus satellite systems. Around 90% of group revenues is outside Norway. Initiatives in the small satellite market have achieved good results. KSAT routinely delivers operative, near real-time maritime products relevant for ship, iceberg, and oil spill detection. Monitoring illegal fishing is a potential growth sector. KSAT has also initiated new initiatives in 2020, like our support to the Norwegian international Climate and Forest Initiative where we'll provide mosaics to monitor global deforestation. Compared to last year's accounts, the group had strong growth in both revenues and profit in 2020. Group revenues were MNOK 1,034, compared to MNOK 928 in 2019, an increase of about 12%. Parent company revenues were MNOK 1,015, compared to MNOK 912 in 2019, an increase of about 11%. Order Income was MNOK 1,600. Sound and unique infrastructure (pole-to-pole), greater demand for services, and an effective organization are among the reasons for the positive development. KSAT has long-term contracts with most leading space agencies as well as with key commercial actors. This stable client base ensures long-term operational capability. Consequently, KSAT can focus on continued growth, innovative improvements, and establishing new business segments. Activities focus on expansion of the ground network with more ground stations, and the establishment of global, multi-mission, near real-time monitoring. KSAT's international leading position builds on its long operating experience, technical expertise, and cost-effective infrastructure, combined with unique geographic locations. Moreover, KSAT 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's only company with internal processing capabilities for all operational radar satellites. KSAT seeks innovative solutions for establishing new services, focusing on the High North in general and on environmental monitoring 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 focus of the UN Sustainable Development goals, with specific follow-up of four goals: (9) Industry, Innovation and infrastructure, (13) Climate Action, (14) Life Below Water, and (15) Life on Land.

FINANCIAL RISK

An appreciable part of KSAT's revenue is in US Dollars (USD) and Euro (EUR), which incurs exposure to exchange risk in ordinary business activities. The group aim for a minimal risk exposure, so that contracts are hedged against fluctuations in exchange rate through forward currency exchange contracts. KSAT has little interest risk, because the greater part of group debt is non-interest bearing, as well as because it has a corporate account arrangement that incurs only net interest for the group. This gives the group ample liquidity and freedom of action.KSAT evaluates the credit rating of each new client and takes precautions if necessary. The credit risk is small for KSAT's largest clients. Clients and suppliers are evaluated to ensure that all activities comply with relevant rules for business ethics, anti-corruption, and general social responsibility.

OPERATIONAL RISK

KSAT is a service provider that depends on operational satellites and other technological equipment to download and process data from satellites. Failed launches, orbiting satellite malfunctions, or faults in KSAT antennas and other facilities may affect development. Operational income from TrollSat in Antarctica is particularly vulnerable to equipment breakdown and the like.

BUSINESS RISK

Business risk is associated with changes in the primary market, escalating competition, and completive access to data from various satellites.

CONTINUED OPERATION

Continued operation is a presupposition for the Annual Accounts.

EVALUATION OF CASH FLOW

In the cash flow analysis, cash and cash equivalents are entered as the net of bank deposits and short-term debt to credit institutions in that these accounts are included in the corporate accounting system. In 2020, the net cash flow from operational activities was MNOK 667, compared to MNOK 401 last year. For the parent company, net cash flow from operational activities in 2020 was MNOK 664, compared to MNOK 362 last year.

The difference between the cash flow from operational activities and operating profit is principally due to ordinary depreciations and significant advances from customers. In 2020, total group investments amounted to MNOK 250. Of that total, MNOK 210 were investments in antenna systems, which contributed to increasing group antenna capacity. In 2020, the parent company investments amounted to MNOK 187, of which MNOK 149 was investments in antenna systems. Net cash and cash equivalents of the group increased by MNOK 316 in 2020. The parent company net cash and cash equivalents increased by MNOK 317 in 2020. As at 31.12.2020, the group cash and cash equivalents were MNOK 421. Group cash flow and liquidity are assessed as strong, and the equity-to-assets ratio is 54% (69%). Group working capital is negative with MNOK 22,5 (MNOK -18.6). The decline in the equity ratio from 2019, as well as the negative working capital, is mainly due to significant advances from customers received at the end of 2020. As at 31.12.2020, the parent company cash and cash equivalents amounted to NOK 525. The parent company cash flow and liquidity are assessed as strong, and the equity to capital ratio is 55% (72%). The parent company has a positive working capital of MNOK 87,6 (MNOK 102).

RESEARCH AND DEVELOPMENT

Nearly 5% of annual revenues 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 welll 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 price pressure in the market

WORKING ENVIRONMENT

In 2020, the Working Environment Committee (AMU) held two meetings, of which corporate health services attended one. AMU consists of representatives of daytime workers and of shift workers in Tromsø and on Svalbard. It has 3 representatives from management and 4 from the employees, of which 1 has observer status. The AMU in KSAT deems the working environment to be safe, sound, and ensured. One workplace accident with minor personal injury was registered in 2020, which resulted in one week sick leave. Sick leave amounted to 2.4%, of which 1.8% was short-term and 0.8% long-term, reductions from the previous year.

SOCIAL RESPONSIBILITY

KSAT is engaged in attaining the UN Sustainable Development goals, which 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 and comply with applicable regulations. KSAT focuses on anti-corruption and is concerned with its social responsibility. KSAT consistently strives to adhere to relevant laws and regulations in all its activity sectors. KSAT contributes to acquiring satellite-based earth observation data that is important for meteorology, resource monitoring, and climate research in general.

GENDER EQUALITY AND DISCRIMINATION

KSAT actively works to promote equality and prevent discrimination. The KSAT personnel policy aims to ensure equal possibilities and rights, and to hinder discrimination based on ethnic background, national origin, sexual preference, skin color, language, religion, beliefs, age, or gender. The headquarters offices are arranged to support disabled people. KSAT management comprises of six men and one woman. The Board consists of one female and eight male directors. The employees have three representatives on the Board. The Board and management are aware of the expectations and measures for furthering gender equality within the company and on the Board. KSAT wishes to be seen as an attractive workplace and hence aim for arrangements that increase the proportion of women in technical positions as within management. In 2020, 23% of KSAT employees were women, against 22% at the end of 2019. The proportion of women in part-time or temporary positions is 27%. Of 187 weeks of parental leave used in 2020, 74% are used by men and 26% are used by women. Salary survey and mapping of involuntary part-time work is planned completed during 2021.

EXTERNAL ENVIRONMENT

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

STATEMENT OF ANNUAL ACCOUNTS

The Board believes that the financial statement satisfactorily describes the group position at the end of the year. Financial position and liquidity of the group are strong, and the Board considers the group's equity to be satisfactory. The Board is unaware of any situations not included in the financial statement that may affect the appraisal of the group's position.

ALLOCATION OF PROFIT IN THE PARENT COMPANY

In 2020, the group profit after tax was TNOK 248,268. The parent company 2020 result showed a profit after tax of TNOK 245,269.

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

	TNOK
Dividend to owners	125,000
To other equity	120,269
Total allocation of profit	245,269

Tromsø,
31 December 2020
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11 February 2021

THE BOARD OF DIRECTORS OF KONGSBERG SATELLITE SERVICES AS

Asbjørn Birkeland
Chairman

Even Aas
Board Member

Harald Aaro
Board Member

Vidar Tyldum
Board Member

Ole-Johan Mikalsen
Board member

Eirik Lie
Deputy chairman

Jostein Rønneberg
Board Member

Knut Myrvang
Board Member

Gøril Bjørkmo
Board Member

Rolf Skatteboe
President

NUMBERS AND FIGURES

INCOME STATEMENT 1 JANUARY–31 DECEMBER

	1000 NOK	1000 NOK	Exch. rate 8,53 1000 USD	Exch. rate 8,53 1000 USD
	2020	**2019**	**2020**	**2019**
Operating revenue	1033 917	927 678	121 173	108 722
Raw materials and consumables	155 248	107 377	18 195	12 584
Personnel expenses	232 763	215 842	27 279	25 296
Other operating expenses	222 311	217 572	26 054	25 499
Depreciations	118 320	107 184	13 867	12 562
Operating profit	**305 276**	**279 704**	**35 778**	**32 781**
Net financial items	(5 010)	(25)	(587)	(3)
Earnings before tax	300 266	279 679	35 190	32 778
Tax expense	51 998	49 202	6 094	5 766
Net profit for the year	**248 268**	**230 478**	**29 096**	**27 011**

STATEMENT OF CASH FLOW

	1000 NOK	1000 NOK	Exch. rate 8,53 1000 USD	Exch. rate 8,53 1000 USD
	2020	**2019**	**2020**	**2019**
Earnings before tax	300 266	279 680	35 190	32 778
Taxes paid	(51 892)	(50 566)	(6 082)	(5 926)
Profit/loss sale of fixed assets	1 999	0	234	0
Depreciation and amortisation	116 321	107 184	13 633	12 562
Change in accounts payable/receivables	(6 908)	55 733	(810)	6 532
Change in pension plan liabilities	739	(2 070)	87	(243)
Change in other accruals	317 424	11 055	37 201	1 296
Net cash flow from operations	**677 949**	**401 016**	**79 454**	**46 998**
Sale of tangible fixed assets	741	1 671	87	196
Payments for aquisition of fixed assets	(252 428)	(245 932)	(29 584)	(28 823)
Paid dividend	(110 000)	(110 000)	(12 892)	(12 892)
Cash and cash equivalents at 1 January	104 867	58 112	12 290	6 811
Cash and cash equivalents at 31 December	**421 128**	**104 867**	**49 355**	**12 290**

BALANCE SHEET AT 31 DECEMBER

	1000 NOK	1000 NOK	Exch. rate 8,53 1000 USD	Exch. rate 8,53 1000 USD
	2020	**2019**	**2020**	**2019**
Assets				
Deferred tax asset	29 423	20 884	3 448	2 448
Operating assets	1 031 290	897 667	120 865	105 204
Financial Fixed assets	29 306	40 847	3 435	4 787
Total fixed assets	**1 090 019**	**959 398**	**127 748**	**112 439**
Receivables	383 298	242 376	44 922	28 406
Bank deposits and cash equivalents	421 128	104 867	49 355	12 290
Total current assets	**804 427**	**347 243**	**94 277**	**40 696**
Total assets	**1 894 446**	**1 306 641**	**222 024**	**153 135**

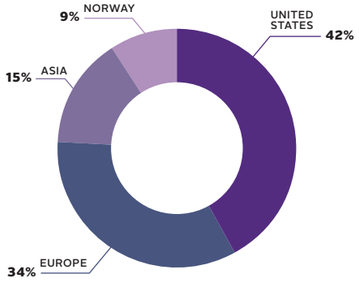
BALANCE SHEET AT 31 DECEMBER

	1000 NOK	1000 NOK	Exch. rate 8,53 1000 USD	Exch. rate 8,53 1000 USD
	2020	**2019**	**2020**	**2019**
Equity and Liabilities				
Share capital	2 000	2 000	234	234
Other equity	1 028 624	905 647	120 552	106 140
Total equity	**1 030 624**	**907 647**	**120 787**	**106 374**
Other long-term liabilities	36 936	33 117	4 329	3 881
Other short term liabilities	826 885	365 877	96 909	42 880
Total liablities	**863 822**	**398 994**	**101 238**	**46 761**
Total equity and liablities	**1 894 446**	**1 306 641**	**222 024**	**153 135**

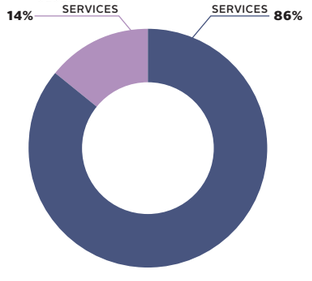
SHAREHOLDERS 31 DECEMBER 2020

Kongsberg Defence and Aerospace AS	50 %
Space Norway AS	50 %
	100 %

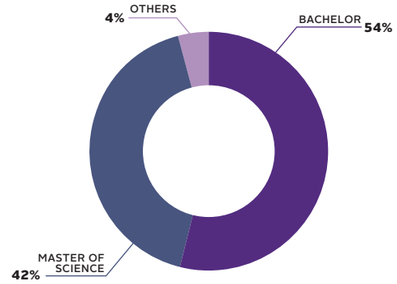
REVENUE GEOGRAPHICAL DISTRIBUTION 2020



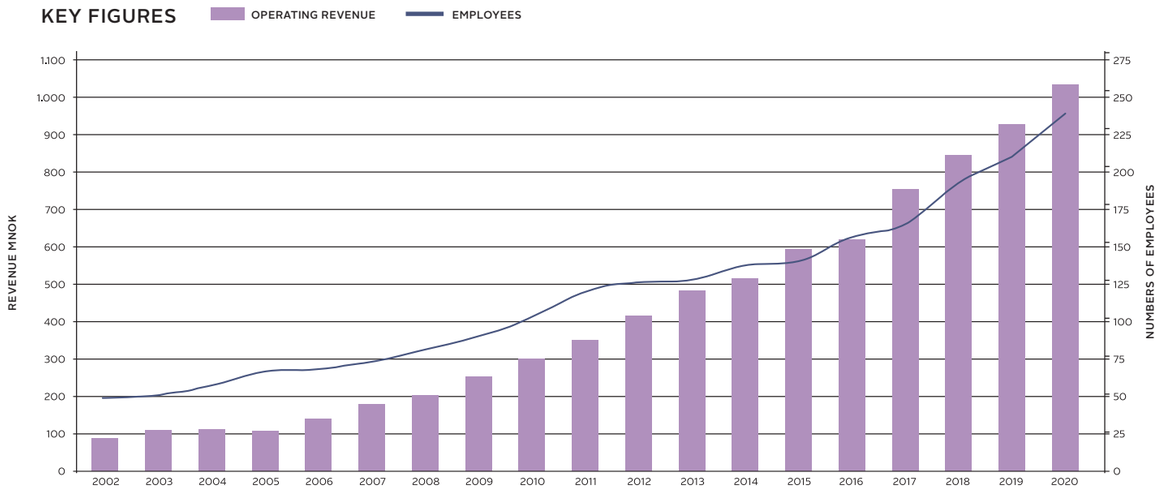
REVENUE DISTRIBUTION BUSINESS AREAS 2020



EMPLOYEES BY LEVEL OF EDUCATION 2020



KEY FIGURES



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