Satellite Executive BRIEFING

Vol. 18 No. 4 May 2025

SATELLITE Markets & Research

Industry Trends, News Analysis, Market Intelligence and Opportunities

Africa: A New Era for Space, and Uncertainty for Satcom

by Blaine Curcio

The African continent can often be an afterthought in high-tech, capital-intensive industries such as space and satellite communications, but any way you slice it, the coming decades are going to see strong growth from this region. With a large and growing percentage of the world's young people, dozens of fast-growing economies, and newly-established space agencies popping up every few months, Africa is a booming frontier market for the global space industry. At the same time, the region's more well-established satcom sector faces uncertainty, but opportunity, from changing market dynamics.

African Space Agency Headquarters in Cairo, Egypt

All this and more was on display at the NewSpace Africa Conference, which took place at the Egyptian Space City in New Cairo from 21-24 April. Organized by Space in Africa, the African Space Agency (AFSA), and the Egyptian Space Agency (EgSA), the conference brought together 550 attendees from some 60 countries in a celebration of all that is African space. Your correspondent was in attendance for the entire week, so let's dig in.

The Rise of Africa's Space Sector

Stemming from growing government interest, the space sector in Africa is undeniably on the rise, and the biggest example during the week took place before the conference even started. On 20 April, Easter Sunday, the gleaming new African Space Agency building was inaugurated. A part of the same massive Egyptian Space City complex that houses EgSA and the new Chinese-built AIT Center, the new AFSA HQ is impressive, with marble floors and high ceilings. Over the coming years, if all goes according to plan, delegates from all over the continent will convene here for joint African space missions and other continent-wide initiatives.

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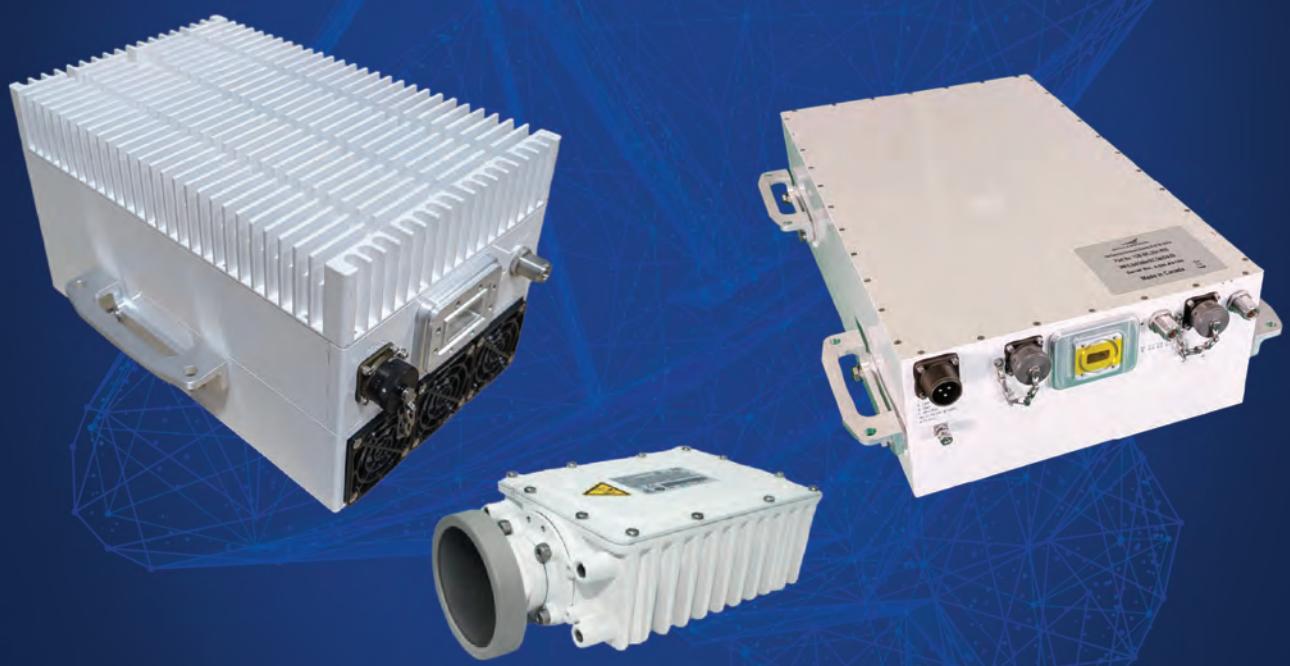

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EDITORIAL

NatSatTel 2025 Highlights Key Industry Trends

Last month, Satellite Markets and Research co-organized the NatSatTel virtual conference together with Intersputnik and the International Telecommunications Union (ITU). The online conference featured key industry executives and experts discussing the latest trends and opportunities in the global satellite industry.

We had very interesting discussions in the various panels and presentations from leading companies such as Neospace Group, Kacific, analytical firms such as Analysys Mason and Novaspace, top industry experts and government representatives from the Caspian region. In case you missed the online conference, the full videos of the proceedings and the slide presentations are now available for free at the NatSatTel website:

Videos of the proceedings:
natsattel.com/videos/

Presentation Slides:
natsattel.com/slides/

Feel free to share the above links to the conference proceedings with your colleagues and friends. And we hope to see you at the next NatSatTel 2026!

Virgil Labrador

Satellite Executive BRIEFING
Industry Trends, News Analysis, Market Intelligence and Opportunities

EDITORIAL

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Satellite Executive Briefing is published monthly by Synthesis Publications LLC and is available for free at www.satellitemarkets.com

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Africa Space...
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And just as well they now have a building, because national space agencies have been popping up like mushrooms across the continent. To name a few:

- Senegal established their own space agency in 2023, and recently signed onto the Chinese International Lunar Research Station (ILRS)
- Ghana is currently drafting the Ghana Space Agency Bill
- Côte D'Ivoire is planning to create a space agency any week now
- And some older agencies are still quite new, with Kenya establishing one in 2017 and Rwanda in 2021.

Most of these new space agencies have similar mandates, typically involving capacity building, knowledge/technology transfer, and economic development. Most of them also emphasize EO projects, with there being plenty of low-hanging fruit in improving agricultural yields, maintaining and defining border regions, and responding to disasters.

And with all these new space agencies popping up, there are unsurprisingly a number of more well-established foreign partners hoping to win business and help develop the continent's space sector. The most prominent during the NewSpace Africa Conference were the US (with the biggest booth right at the front of the expo area), France, Japan, and the European Union. Also present in a more subtle way was Russia and Turkey, while unsung hero and conference host Egypt was positioning itself front and center as the big brother to the rest of Africa's space sector.

"...With a large and growing percentage of the world's young people, dozens of fast-growing economies, and newly- established space agencies popping up every few months, Africa is a booming frontier market for the global space industry..."

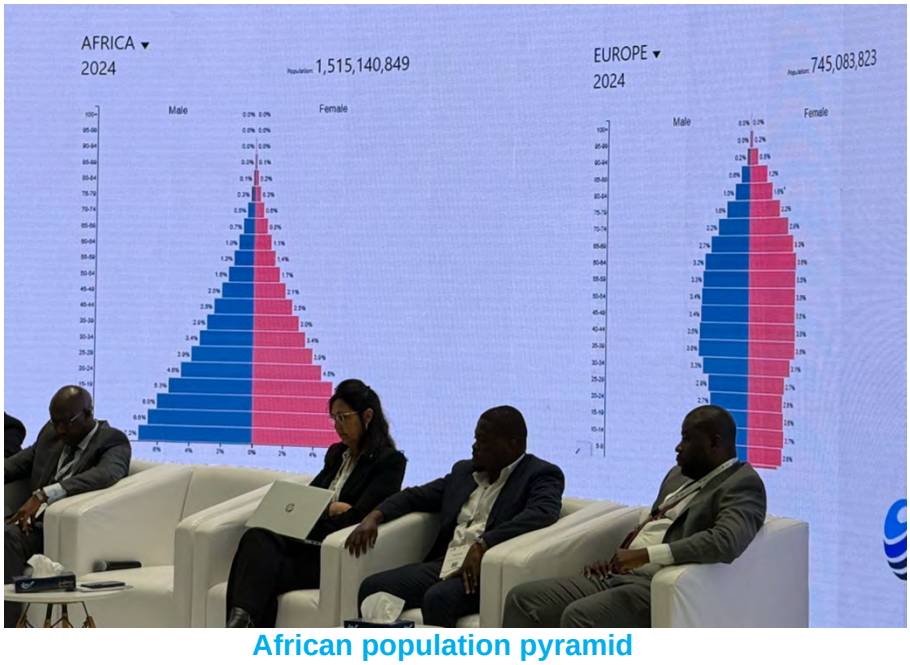
Egypt's Role

With a population of >100M people, Africa's second-largest economy, and a long history of advanced manufacturing, Egypt has emerged as a major power in the region's space sector. The most obvious example of this, of course, is their hosting the AFSA building at their own Space City, but it extends far beyond this. The entire conference was an advertisement that Egypt is **open for business**.

During the week, EgSA representatives organized tours around the Space City, where we saw cubesat kits full of all the major subsystems for sale, complete with training modules that teach aspiring satellite engineers the functions of each subsystem, and how to integrate them into a cubesat. These kits are already being used in a number of Egyptian universities, our tour guides proudly told us as African representatives scribbled notes and practically got their order forms ready.

For heavier-duty stuff, the Space City's satellite AIT center can build satellites of up to 650kg, and has already integrated a few. And as a reminder to attendees about Egypt's heritage in such things, EgSA informed us that they have already trained 71 engineers from >20 African countries in a variety of satellite technologies.

Egypt has learned from some of the best, with the country having a lengthy track record of collaboration



African population pyramid

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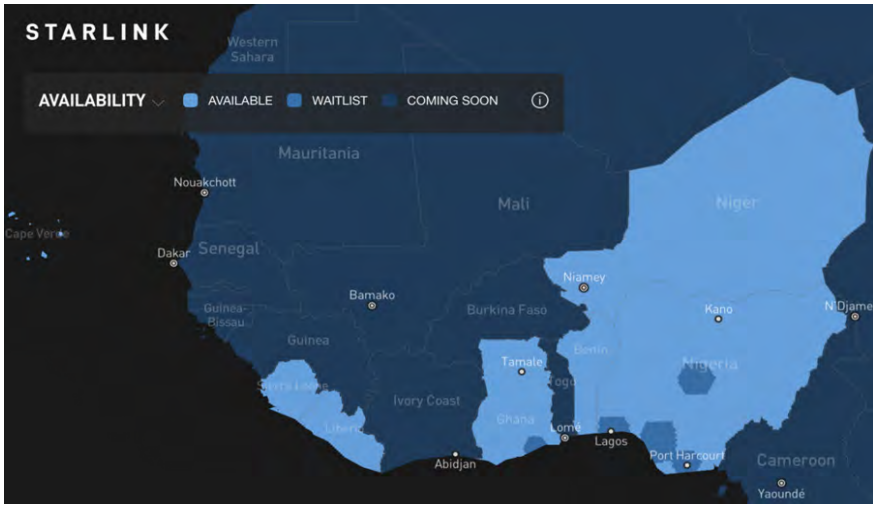
with the US, and having also co-developed satellites with both China and Germany. They are clearly positioning themselves to be a source of technological knowhow for a fast-growing continent for the long-term future, and this week was basically a coming-out party for that plan.

The Satcom Industry

While not front-and-center, there was plenty of discussion on satcom in Africa during the week. Conference speakers included regional operators Nigcomsat (Nigeria), Angosat (Angola), Nilesat (Egypt), RASCOM (Regional African Satellite Communications Organization), as well as Eutelsat-OneWeb.

First, despite challenges in the satcom sector, several regional players are looking for new commsats. An official from Nigcomsat noted that they are looking to procure two new satellites this year, while regional satcom operator RASCOM is kicking the tires of several manufacturers for a possible replacement of their ~15 year-old RASCOM QAF-1R satellite. Similarly, Angolan operator Angosat has seen decent fill rates on the recently-launched AngoSat-2, and would consider another comms satellite in the coming years if they can boost fill rates further. These trends are likely to accelerate if the plethora of small GEO manufacturers in the market start to pick up momentum, allowing for country-focused satellites to become an easier financial pill to swallow.

Second, Starlink loomed large, but was on one hand looming large, but on the other hand oddly absent.



Starlink availability in West Africa, with the darker blue spots in Nigeria, Ghana, and Benin being sold out.

While companies such as Amazon Kuiper, Eutelsat OneWeb, and ViaSat had prominent speaking roles, no one from Starlink was publicly visible. And while the topic of Starlink came up on a few panels, it was more frequently indirectly alluded to as "non-geo competition" or similar.

This is interesting, because in countries such as Nigeria, Starlink has begun to cause substantial disruption to local service providers. One needs to look no further than the areas around some of Africa's largest cities—Nairobi, Lagos, Harare, Accra, and others—where Starlink is currently sold out, to understand that the service has a substantial market there, despite high costs relative to purchasing power.

And across the continent, the above-mentioned national satellite projects, many of which have been financed with foreign debt, are looking increasingly outdated compared to the high throughput brought by Starlink and in the future, other NGSOs. It's too early to tell what the role of Starlink will be in the region, but to paraphrase one of the regional satcom operators during a panel, "Starlink is an existential threat. If countries don't do the license framework well, you're going to kill the African market".

What's Next for Africa's Space Sector

After only a handful of days at an African space conference, I am far from an expert on the region. But, with such an action-packed show, I feel like I can make a few predictions, to be taken with a grain of salt. In the near-term, there is clearly going to be continued growth among African space programs, both nationally and continentally. More and more countries are seeing value in developing space capabilities, and they are being presented with more ways to do that.

Emphasis will be placed on capacity building, talent development, technology transfer, and perhaps most important, developing real-world applications that can lead to a return on investment for the precious dollars being spent on space budgets in the

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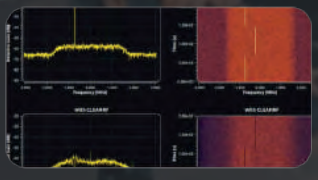

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region. Low-hanging fruit such as remote sensing for agriculture, border control, and land use monitoring will see the strongest tailwinds, but other areas such as space science and international collaboration on larger missions will also see momentum. Examples of the latter include Senegal's signing onto the ILRS, and plans for signing on to Artemis.

On the satcom side of things, the picture is a bit murkier. Several regional operators expressed optimism about procuring new satellites, but at the same time, there is clearly the threat (or opportunity) of NGSOs creating complications with that narrative. A few people spoke about a regional NGSO constellation, a sort of African version of IRIS2, though where the billions of required investment would come from is anyone's guess.

Overall, one thing is for sure: Africa is the world's fastest-growing region in terms of population, and is likely to play a growing role in the global space sector. A speaker from the South African Space Agency showed a well-known but nonetheless impactful age pyramid of Africa and Europe. Africa's population is not only twice as large, but it is vastly younger, creating a massive demographic tailwind offering opportunities and challenges for the continent.

In a world where space continues to grow across all regions, Africa is unlikely to be an exception.

Blaine Curcio is the Founder of Orbital Gateway Consulting. He's an expert on the global commercial space and satellite industries He can be reached at: blaine@orbitalgatewayconsulting.com

Five Ws and One H for System Success

by Bruce Elbert

Here they are: WWWWWM – the five Ws and the One H – it stands for those familiar questions: who, what, where, when, why and how. You can ask Google or ChatGPT to define these and you'll get some pretty good generic answers. These are the standard questions that according to journalistic practice should be answered by any article, preferably the lead paragraph. For our industry, these simple questions are not simple to answer, whether as a business or as a strategy:

- Who – the users or subscribers. You need to know their characteristics, market needs, etc.
- What – the application or applications you intend to provide them, including their situation and means to connect.
- Where – the obvious – where are your users located? Communication from space inherently involves wide-ranging served locations. These can be static and/or dynamic. And where are your media access points or gateways?
- When – the service will take time to happen. Is there a long timeline or is the need immediate? Is it a simple access issue, or full deployment and program duration?
- How – always the main focus of creating a system and making the application available to users. This is true engineering.
- Why – often ignored or even uncertain. This is the biggest question for leadership to answer. This is where entrepreneurship comes into play. More on this later.

Technology is the How of creating a new capability in satellite communications. Technology, broadly defined, is anything made by humans to produce a required outcome. In our world, this includes both hardware and software.

We can divide technology into three classes:

1. Components that are developed and produced as identifiable items. As such, they come to us through a variety of suppliers who design, manufacture and distribute them.
2. Systems that are composed of a plethora of components, both existing and newly developed.
3. Processes that exercise the components to perform a wide variety of functions – that is, processes that are made possible through human staff and software.

"...Standards are a class of component and they can have a role. One unfortunate challenge is they may complicate the development of the system if the standard offers no concrete benefits to the early adopter..."

Standards are a class of component and they can have a role. One unfortunate challenge is they may complicate the development of the system if the standard offers no concrete benefits to the early adopter.

As a technologist, I am often asked to give the list of the most important technologies of the day. Technology is actually the How part of this – we use systems engineering to take the requirements presented from the other questions and move forward with an architecture.

Let's take a look at this presentation of contemporary elements in a modern satellite communications system. These are broken down into the classes I just covered; I've differentiated between technological elements of the space segment and those of the ground segment. This presentation is not all-encompassing but simply one man's view. I'll point to some of these now (see my previous article for more discussion).

Among the technological devices in the space segment, I like small spacecraft that are designed as an integrated product and produced through automation. This is in contrast to how large GEO satellites come together more like a custom home than an automobile. Obviously, digital payloads in general and dynamic beam forming in particular are vital for achieving cost/effective broadband services directly to users. There is a parallel on the ground segment side in terms of digital devices that are flexible and have high bandwidth efficiency as well. Power amplifiers in general and SSPAs in the millimeter wave spectrum are gaining ground.

For systems, pulling small satellites together in a constellation and making it function reliably demands a high degree of intelligence in the management of space

	Space Segment	Ground Segment
Technological Devices	Small spacecraft, SSPA, sensors, optical transceivers, onboard processors, beam forming antennas, thrusters and engines	Self-pointing antennas, planar arrays, SSPAs, communications processors
Systems	Constellation, Launchers, Digital Twin	Waveform and multiple access, Network management systems
Processes	Constellation management, Spacecraft manufacturing, Supply chain	Engineering and operations, Customer services
Standards	CCSDS, OISL (SDA), NASA TRL, SO/IEC/IEEE 15288:2023	DVB-S2x, 3GPP NTN, SDN

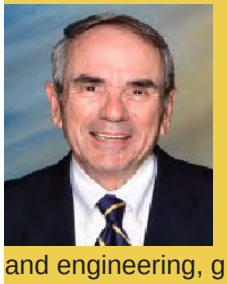
resources and their connection to the ground. Add to this the potential for multi-orbit and it gets very complicated. I like the vision of Software Defined Networks (SDNs) and the concept of the digital twin for representing the components and their operation within the cloud to better design and operate through all demands, including changes in needs and link performance.

I am personally fascinated by the Why – what are the characteristics and its genesis? Here are some classic examples of the role of Why in creating something amazing in telecommunications.

- Bell and the telephone (patented in 1876)
- Marconi and the wireless (Trans-Atlantic in 1901)
- Rosen and Syncom (launched into synchronous orbit in 1963)
- Bertiger and Iridium (first call in 1998)
- Musk and SpaceX and Starlink (demos in 2020)

Bell and Marconi started their companies based on a new technology supported by the monopoly power of patents. From there, they partnered with investors to create their networks. Rosen and Bertiger were driven engineers who wanted to see a new approach to providing communications from space to earth. Rosen took Arthur C. Clarke's idea of the Geostationary satellite and made it happen with a small satellite launched by the NASA Delta rocket. Bertiger wanted to make mobile phone calls from remote places and compiled his project within Motorola involving Lockheed Martin and Raytheon. Rosen and Bertiger had backing of their respective corporations: Rosen from Hughes Aircraft Company (started by that preeminent tech entrepreneur, Howard Hughes) and Motorola, the innovator in terrestrial mobile phones. Lastly, we see before our eyes how one person, Elon Musk, started with his vision of space exploration and colonies on Mars and developed first the most successful rocket company in history; and then the first true broadband LEO system delivering cost/effective Internet to the globe, that has changed our industry along the way.

That's the power of Why. Altogether, WWWWWH – can be written upside down and backwards as HMMMM (pronounced "*hummmmm*"). It works in journalism as it does in telecommunications. Forbearers and modern entrepreneurs get it right to their advantage – and ultimately ours.



Bruce Elbert is the Founder and President of **Application Technology Strategy LLC**.(www.applicationstrategy.com) He is a satellite industry expert, communications engineer, project leader and consultant with over 50 years experience in communications and space-based systems in the public and private sectors. Areas of expertise include space segment design and operation in all orbit domains, systems architecture and engineering, ground segment systems engineering, development and operation, overall system performance improvement, and organizational development. He can be reached at: bruce@applicationstrategy.com

Francesco Cataldo
Chairman of the Board, iKO Media Group

First of all, congratulations on your appointment as Chairman of the Board of iKO Media Group (iKOMG). As you assume your duties as Chairman, can you give us a brief overview of where you see the company as it stands today in the key markets that it serves?

Thank you. As I step into this role, I see iKOMG as a company at a very exciting and strategic point in its evolution. The media landscape is rapidly evolving, with traditional broadcasting models giving way to hybrid solutions that blend satellite, IP, and cloud technologies. iKOMG has strategically positioned itself at the forefront of these changes.

Today, we serve clients across Europe, the Middle East, Africa, and Asia with a comprehensive portfolio that includes satellite uplink and playout services, OTT delivery, cloud-based solutions, and growing support for FAST channels. Our strength lies not only in our advanced technical infrastructure—such as state-of-the-art teleports and cloud integrations—but also in our flexible, client-centric approach.

When I joined iKOMG, I was inspired by the energy and collaboration across the team. It's a young, dynamic group of talented professionals, all driven by a shared sense of purpose. There's a mix of curiosity, creativity, and technical know-how that keeps us moving forward. That spirit is what allows us to be more than just a service provider. It's how we become true partners in our clients' success.

Francesco Cataldo

Where do you see the company going forward in the next few years?

Looking ahead, our focus is on deepening our role as a solutions partner – not just a service provider. Our clients are navigating a rapidly shifting media landscape where agility, scalability, and reach are paramount. iKOMG aims to make global distribution effortless—whether through satellite, IP, cloud, or a strategic blend of all three.

To support this vision, we've invested significantly in upgrading our teleport infrastructure to enhance quality of service (QoS), increase resilience, and ensure greater broadcast continuity. These improvements are complemented by the expansion of our 24/7 Network Operations Center (NOC), enabling us to provide consistent, real-time support to our global customer base.

We're also exploring new business concepts to offer more value to our clients, reflected in the innovative products we've developed and commercialized. Our natural inclination to adopt new technologies positions us to create pathways for broadcasters and creators to expand revenue streams while controlling costs and ensuring quality.

Ultimately, our vision is to become the most agile, customer-centric media delivery company in the industry—trusted by broadcasters, streaming platforms, and content creators alike to handle everything from signal acquisition to final screen delivery. We're building for the future of how the world consumes content.

There are two major trade shows this month with CABSAT in Dubai and Satellite Asia in Singapore. Can you tell us briefly about iKOMG's offerings for the Middle East and Asia-Pacific markets?

Absolutely. We're really looking forward to both shows. CABSAT is set to be an exciting one for us. At CABSAT, we're excited to officially launch our eCLUTCH esports package in the Middle East, in collaboration with Eutelsat. This innovative offering combines satellite and cloud services to bring esports content to wider audiences, exemplifying our hybrid approach to content distribution.

We're also introducing our "FAST ON SAT" project, bringing FAST channels to the Eutelsat 7W satellite with programmatic advertising and integrating these channels into MENAFLIX, our OTT service tailored for the MENA region.

In Asia, we're renewing our commitment to the region by showcasing our full suite of capabilities. This includes our OTT services, such as MENAFLIX, and our own products like eCLUTCH and PadelTime TV. Additionally, we're highlighting our new Middle Eastern teleport, which serves as a strategic gateway between Europe, Asia, and Africa, offering numerous technical advantages.

When your appointment was first announced, the company affirmed its commitment to expanding into new markets and driving technological innovation. Can you elaborate on your specific plans in this regard?

We're committed to expanding our presence in high-growth regions such as Africa, Southeast Asia, and Latin America, where demand for both traditional and digital delivery is increasing. Simultaneously, we're investing in new technologies, including enhanced cloud-based playout, AI-powered metadata and compliance tools, and stronger OTT capabilities. Our natural instinct to adopt new technologies ensures that we stay ahead of industry trends and meet the evolving needs of our clients. Our focus remains on customer satisfaction, and we continuously seek new business concepts to offer more and better services, as reflected in our diverse product portfolio.

What differentiates iKOMG from other service providers?

What truly sets iKOMG apart is our ability to combine deep technological expertise with a highly client-centric, agile approach. In a market where many providers offer fragmented or off-the-shelf solutions, we deliver fully integrated, end-to-end media delivery services tailored to the exact needs of each client.

Whether it's traditional satellite broadcasting, IP contribution, OTT streaming, or a hybrid model, we design workflows that are flexible, scalable, and built around real-world use cases. Our teleport network and operational backbone have been significantly upgraded to enhance QoS, boost resilience, and guarantee reliable global signal delivery. These upgrades are supported by our 24/7 NOC, staffed by skilled professionals who monitor every feed, playout schedule, and signal path in real time.

We foster a spirit of partnership in everything we do, working closely with each client to understand their business goals and help them achieve them—whether it's entering a new market, monetizing content more effectively, or launching a new channel under tight deadlines. Our size and structure allow us to be nimble, responsive, and hands-on—qualities often lost with larger providers.

Innovation is in our DNA. Initiatives like "FAST ON SAT," modular cloud playout solutions, and our evolving portfolio of digital tools are all designed with one goal: to future-proof our clients' operations in a fast-changing media landscape. At iKOMG, we're not just keeping up with change—we're helping to lead it. That's what sets us apart.

Anything else you would like to add?

Yes, one final thought that's central to our philosophy: Satellite isn't dead. It's evolving.

In fact, satellite is now a vital part of the hybrid future, seamlessly integrating with IP and cloud technologies to deliver reach, resilience, and reliability at scale. At iKOMG, we don't just believe in that future—we're building it.

Everything we do is driven by a commitment to innovation, customer satisfaction, and global growth. Our young, dynamic team is constantly pushing boundaries, developing smarter solutions, and turning bold ideas into reality. We're expanding across continents, growing both organically and through strategic partnerships, and redefining what's possible in media delivery.

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Creonic Unveils Bold Rebrand to Drive Innovation in Communication Technologies

Creonic, a provider of high-performance IP cores for delivering cutting-edge signal processing solutions that power global communication technologies.

A Bold New Look for the Future

The redesigned logo reflects Creonic's mission of technological precision, featuring sleek geometric elements company's leadership in communication technologies.

Mission-Driven Innovation

Creonic remains committed to empowering businesses with world-class IP cores for satellite communications and high-speed terrestrial communications. The rebrand highlights the company's vision of seamless global connectivity, backed by expertise in digital communications and a focus on customer success.

Core Values and Market Leadership

Creonic's foundation is built on innovation, excellence, and customer-centricity. As an ISO 9001:2015 certified - cations, supporting industry standards like 3GPP 5G, ETSI DVB-S2x, CCSDS and IEEE Wi-Fi.

New Tagline: "Your Core in Communication Excellence"

This new tagline captures Creonic's role in advancing high-performance, low power and reliable communication solutions worldwide.

Creonic is an ISO 9001-2015 certified leader in ready-for-use IP cores, offering a rich services and product portfolio for wired, wireless, fiber, and free-space optical communications. Covering essential digital signal processing algorithms such as forward error correction, modulation, equalization, and demodulation, as a preeminent provider, our solutions support industry standards like 3GPP 5G, DVB-S2X, DVB-RCS2, CCSDS, and Wi-Fi. Designed for

ASIC and FPGA technologies, Creonic's products meet the highest benchmarks of quality and performance. Trusted by dozens of customers worldwide, from innovative start-ups to global corporations, our IP cores power communications devices and chipsets, satellites, and NewSpace ventures, enabling unparalleled reliability and success in advanced communication systems.

The company also annouced recently the release of its (inverse) Fast Fourier Transform (FFT/IFFT) IP core with Error Correction Code (ECC) memory support. Designed to meet the growing demand for efficient, error-tolerant signal processing solutions.

Creonic's Fast Fourier Transform uses the Cooley-Tukey algorithm internally. The new IP core produces transformed complex samples as output when operating on complex or real signal samples. The transform is executed by the core in a pipeline with logarithm 2 (transform length) stages, ensuring fast and accurate processing.

With many applications, including multi-carrier transmitter and receiver systems, spectrum analysis, signal filtering, and data compression, the FFT IP core is a versatile tool that can be used in various domains and segments. The ECC feature provides a competitive advantage for space applications where radiation tolerance is a stringent requirement.

Creonic will be at CABSAT 2025 in Dubai and Satellite Asia in Singapore this month. To schedule a meeting e-mail: **sales@creonic.com**

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Administrative Blockages Put Europe's Ability to Defend Itself at Risk

by Dr. Robert Brüll

Strategic autonomy' has long been an ambition of the European Union (EU). It refers to the capacity of the EU to act without being dependent on other countries in strategically important policy areas, such as defence. European Council President Charles Michel called it 'our new common project for this century' as well as 'the aim for our generation'. Now, amid global uncertainty, strategic autonomy has become a necessity.

Obstacles to Autonomy

Driven by that uncertainty, defence budgets, after years of being at threat of being cut, have swelled. Successive governments perceive the world as having become a lot more uncertain than it has been in recent years, and uncertainty creates concern. EU member-states have also suggested a €500 billion joint fund for defence projects and procurement. But the problem in Europe's case is that a rise in defence spending isn't enough to secure the safety of the bloc. Europe's defence industrial strategy is ensnared in bureaucracy and paralysed by inefficiency. This is the main obstacle to military autonomy.

Why is this? Because decades of underinvestment have left gaps in key supply chains. These supply chains are the veins and arteries of any modern armed force: shuttling tools, technology, arms and ammunition to where it's needed – but also fragile, if indispensable. Production lines are fragmented, priorities are in competition, and national governments – quite unsurprisingly – want to protect their own national industries.

Space Startups

This isn't the only hurdle. Defence startups, or startups whose products have defence applications – many of them operating in the space sector – are still viewed with suspicion by government and public agencies in Europe. They're typically perceived as untested, unproven, and so not worthy of any sizable investment. But without investment, they can't prove themselves – or, at least, won't be able to do so for some time. The problem, then, is chicken-and-egg.

"...Defence startups, or startups whose products have defence applications – many of them operating in the space sector – are still viewed with suspicion by government and public agencies in Europe..."

Many space startups develop technology or products with defence applications. The two areas are closely linked. Their founders and senior teams would leap at the chance to enter a new market without having to change their core offering in any meaningful way. Many products, including ours, are no different whether they're used for civilian vehicles, tanks, spacecraft, dummy ships ('rubber ducks'), chaff for fighter jets, or something else. In Ukraine, it's barely an exaggeration to say that every startup develops products with defence applications.

But even if a space startup developed products whose applications were principally civilian, investment, or the prospect of investment, might encourage them to pivot or put more time and energy into defence product development. It would also incentivise aspiring entrepreneurs, researchers, scientists and others to launch defence startups and take advantage of that expanding market.

A Culture of Caution

It isn't just the government and public agencies who are wary of investing in defence startups. Venture capital firms in Europe are put off by any mention of defence. Their criteria for backing companies remain strict, owing to Europe's peaceful recent history. After the carnage of the Second World War, the countries of Europe made determined efforts to avoid another conflict breaking out on the continent through diplomacy and disarmament. That commitment grew even stronger after the wall came down in 1989. Culturally and politically, Europe developed a powerful aversion to militarism and aggressive nationalism, and from that rigid criteria for investment in defence-related

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industries emerged. Many investors have preferred to back companies in sectors that align with social or environmental goals. Even space startups who primarily develop products with civilian applications can be victims of this.

Since the invasion of Ukraine brought war to Europe's doorstep, the continent's attitude is changing, but it's changing slowly. Because what is having to change is deeply ingrained. Europe's unease about defence investment reflects the horrors the people of the continent experienced in the 20th century. Those same people are not easily persuaded that the present circumstances require a shift in outlook. But a shift in outlook is required. It's a cliché to say that 'if you want peace, prepare for war', but the reality of this moment in our history is that we need to think seriously about defence – which means investing seriously in it.

The U.S. Example

These are problems that the United States doesn't have. Procurement for defence purposes is centralised and efficient. Needs are swiftly met. The different forces of the US – the Air Force or Navy, for instance – even have their own channels and budgets to get the things they want at short notice. In Europe, whose history, geography and political structure is, of course, vastly different to that of the United States, this isn't the case at all. There are small production runs, needless duplication and conflicting national priorities. This hamstrings the goal of strategic autonomy as it pertains to defense. And the upshot of that is that the continent, despite its wealth, freedom and rich tradition of innovation, is struggling to rise to the challenges it faces in a volatile world.

One reason for this, as mentioned above, is that Europe is not in the habit of thinking about war. We have been blessed with having a largely peaceful continental culture for decades. While the US locked horns with the Soviet Union and others, celebrated its soldiers and built a culture around the need for defence and security, Europe, despite involving itself intermittently in conflicts, has remained largely peaceful in its outlook.

Companies like FibreCoat supply vital shielding materials to NATO allies. But scaling these efforts across Europe remains an arduous task. In theory, local production could stabilise disjointed supply chains, reducing the dependency of any given country on faraway sources, or ones going through political turbulence, which can make them unreliable. In practice, however, establishing cross-border manufacturing in Europe isn't straightforward. Procurement offices resist long-term agreements, discouraging industry investment in large-scale facilities.

A Path Forward

Defence firms could partner with local companies and make use of the existing infrastructure. Or they could design modular products, enabling separate parts to be shipped in standard containers and then assembled closer to the battlefield. These are part-solutions, though they are not structural or systemic. Those issues require change at a deeper level. Europe will have to consider how to make joint procurement the default option, rather than the exception to the rule. Some kind of reconciliation between national priorities and the collective good must be sought out. The gaps in the continent's major supply chains will need to be identified and filled in. A unified body with the agility and responsiveness to be able to grapple confidently with whatever the future holds is within Europe's grasp. But reform will be needed.European leaders showed foresight by prioritising 'strategic autonomy' as far back as 2013. They were mindful that things change, and that a bloc such as Europe should be able to take care of itself. The task now is to remove the obstacles to making that happen, stripping away the layers of complexity that no longer support the objectives of the Union. That will allow the continent's many innovative space and defense businesses to grow and to get their products where they're needed without undue delay. Europe has to be able to hold its own and protect its citizens – and to avoid being dragged into potential conflicts that stem from the tensions between its allies and others.

Dr. Robert Brüll is the Founder and CEO of FibreCoat, a provider of advanced materials technology. FibreCoat's lightweight, high-performance, cost-effective, electrically conductive materials protect against radiation, heat, and electromagnetic interference (EMI), making them crucial for space, defense, automotive, and construction.

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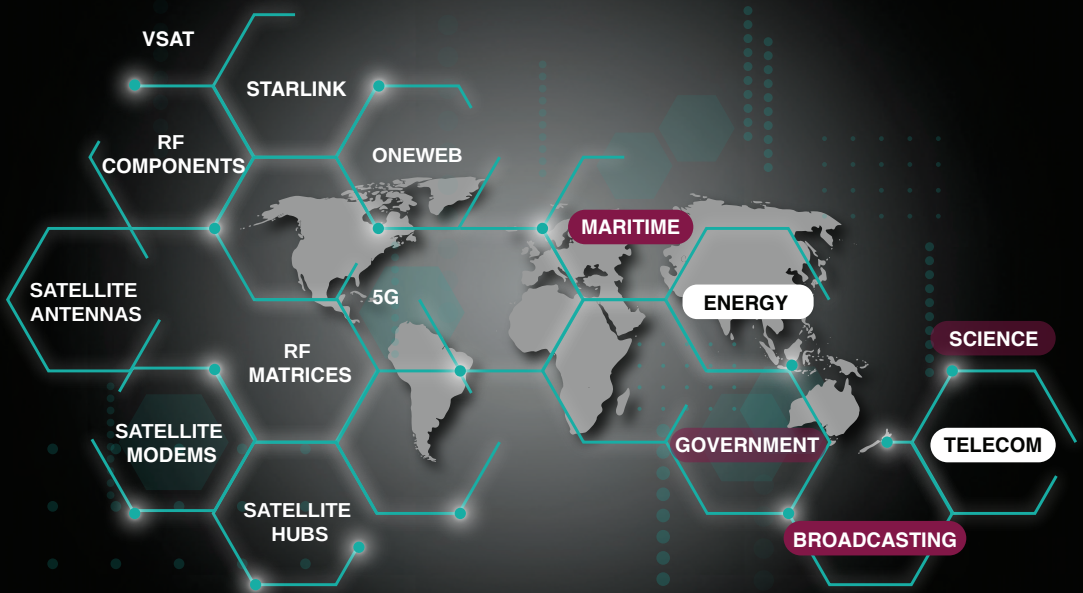

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visit Es'hailSat at SATEXPO ME booth #S3-B10, Sheikh Saeed Hall 3

Es'hailSat, the Qatar Satellite Company, is a communications satellite operator headquartered in Doha, Qatar. Established in 2010, Es'hailSat delivers services to broadcasters, enterprises and governments in the MENA (Middle East and North Africa) region and beyond. With the goal to become a world class satellite operator and the foremost satellite services provider in the MENA region, Having both Ku-band and Ka-band payload on satellites co-located at 25.5°E / 26°E broadcast hotspot enables Es'hailSat to provide the region with the most advanced and sophisticated services including broadcast, telecommunications and broadband.

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Integrasys, founded in 1990 by former Hewlett Packard engineers, specializes in software solutions and manufacturing of Satellite Spectrum Monitoring Systems, VSAT Installation & Maintenance, and Link Budgets in the SATCOM and broadcasting markets. With over 20 products, including Beam Budget, FlexCap, Controlsat, and Vectorsat, the company has been leading the innovation in the satellite industry for over 30 years. At INTEGRASYS, our mission is to provide the industry with the best quality and fastest technology available to save time, effort, and OPEX, with the service and care that our customers deserve.

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Mission Microwave

visit Mission Microwave at SATEXPO ME at the Decibel Systems booth #S2-C20, Sheikh Saeed Hall 2 and at Satelltie Asia at Booth #4J2-7

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Headquartered in Holzkirchen, Germany (near Munich), and comprised of four operating product lines —Satellite Communication, Navigation Simulators, Defence Electronics, and Sensors and Measurement — **WORK Microwave** leverages over 35 years of experience to anticipate market needs and apply an innovative and creative approach to the development of its technologies while maintaining the highest standards for quality, reliability, and performance. WORK Microwave's Satellite Communication product line develops and manufactures high-performance, advanced satellite communications RF- and optical ground segment hardware and software for earth observation, NGEO constellations, direct-to-home broadcast, IP networks, teleport management, government communications, and many more applications.

For more information, go to: www.work-microwave.com

The Bright Side of Changing Diapers

The late American comedian Robin Williams joked that politicians need to be changed like diapers: frequently and for the same reason. You cannot trust a human being who holds and builds-up that much power or authority for too long. Stuff that isn't savory will inevitably accumulate.

So it is that in the world of politics, where promises escape into the air like sewer gas through a ruptured New York City pothole, we have come to recognize that term limits have many virtues. They are a sign that healthy democracies and communities are based on the assured notion that trust and change are both good and inevitable. The next person in the game can play the position. The risk is a worthy one.

This is a cornerstone of innovation too. Innovation depends on openness and trust and is defined by constant change and challenges to orthodoxy. Complexity theory calls for constant injections of the new and untested among many smaller elements of a system. There is no "end game." The late Senator Daniel Patrick Moynihan of New York, commenting on the persistent attempt by the (then) Soviet Union to steal American and Western industrial and military secrets noted that, ultimately, they would not meet with the kind of success they coveted because, simply put, "Technology is not a secret. It is a system."

AT THE HEART OF THE INDUSTRY'S SYSTEMS OF ENGINEERING....

Of all the components of our industry's current and evolving systems I believe that Trust is at the core. So is the promise to achieve whatever can be achieved for a higher, more noble goal. They seem to be fused the way an antenna and a transponder are.

But trust is the trickiest quality of all human virtues to outright engineer. It is an odd mixture of culture, fear, peer pressure, altruism, financial incentive, law and a belief in a higher authority which will call "balls and strikes" and, to mix sports metaphors, issue a red card when necessary. It requires someone or something to change the diapers.

"...Innovation depends on openness and trust and is defined by constant change and challenges to orthodoxy..."

After nearly 30 years of moderating panels, hosting the longest-running weekly Podcast in the industry (www.sspi.org/podcast), writing dozens of blogs and articles and creating multiple awards programs (WTA's Teleport Awards for Excellence and The Better Satellite World awards dinner in the UK), I am closer to understanding the secret to the success of companies in our industry, as well as the nations, regions and cities that produce these "winners."

Here is the secret: there is no secret. It's a system. Moynihan was right. I also know that Silicon Valley is wrong. Failure is not "good for your character" or even securing the first round of funding. As Chicago Cubs fans said after not winning a World Series after 108 years of heartbreak, "We have enough character already."

To win, to really succeed, is to trust. Trust the team. Trust its (and your) creativity. Trust in the promise you make to others to use your success to make a better world.

BUT WHAT GIVES TRUST AGENCY?

It has something to do with education. But not always and not everywhere. Fifteen years ago, USA Secretary of Education (before that department was sent to Detention), noted that US$ 650 billion had been spent on K-12 education that year. He summed the results up by concluding, "And there has been less than a one percent change of anything!"

Not good.

It is what you learn and the degree you can trust and agree on the goals of learning that makes the dif-

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ference. Ten years ago, Luxembourg had the highest education spending level in the EU with an average of 4,635€ per "inhabitant" (their word) compared to the EU average of about 1,400€.

There, things changed.

Luxembourg was ranked second as "most open for business." Of worldwide assets under management over half of microfinance funds are based in the Grand Duchy. I have reported that companies such as Redwire and investment firms such as Promus Ventures do business there.

Luxembourg is not a giant like China or the USA. Not a honey trap for economic development like some in the Middle East. But it does abide to law and the trust of colleagues. It knows where it wants to be and has had great success through "win-win" collaboration.

Perhaps our industry has something else that facilitates trust that few others with the exception of NASCAR and airlines perhaps have.

Our industry has the "existential edge." There is something about the sheer thrill and danger of Space that is embedded in the industry's psyche. As Nicole Stott says in her book Back to Earth https://tinyurl.com/yjhdmy3k, "When death is a few inches outside your cabin, you tend to rely on each other." She uses that as a moral tale for establishing trust here.

I am concluding more and more that making a promise, swearing oaths and collegiality also have in them the quiet thrills of human

contact and community that serve us well. They sound simple, or "soft" or more EQ than IQ. But what a revelation it is to see them in action anywhere. Even in a public space.

OOOPS!

In Japan I witnessed an amazing display of a culture of trust at Narita Airport when a person hurrying across the terminal fell and her bag spilled out in every direction a mobile phone, a shelf filled with Duty Free cosmetics and items that can only come from the depths of a woman's bag! Within seconds of her mishap at least 12 people rushed to her aid to scoop up the items and return them; a social obedience and show of trust that in the end passed like passengers in an airport do, but that said more than my words here could begin to say. When you hear that sound, rush in a spirit of trust if you can.

Lou Zacharilla served as the Director of Innovation and Development for SSPI and World Teleport Association and was the Host of "The Better Satellite World" podcast. He is currently a freelance writer and Podcaster and a founder of the Intelligent Community Forum think tank in New York. He can be reached at: zafu88@gmail.com

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CABSAT Featuring SATEXPO and Integrate Middle East

The highly anticipated CABSAT, SATEXPO and Integrate Middle East (Integrate ME) are set to return in 2025 with their latest editions, taking place from 13 to 15 May 2025, at the Dubai World Trade Centre (DWTC). These renowned events will unite leading professionals from the media, content, broadcast, Pro AV, and technology sectors to explore cutting-edge innovations and trends reshaping the future of these industries.

SATEXPO is the premier annual gathering of industry leaders, innovators, and enthusiasts in the satellite and space technology sectors. This event showcases the latest advancements, drives collaboration, and explores the emerging trends shaping the industry's future.

Marking its 31st edition, CABSAT is set to be more impactful than ever this year, bringing together over 450 exhibitors and 18,000 attendees for three days of engaging discussions, demonstrations, and networking. As the Middle East's premier event for content, broadcast, satellite, media, and entertainment, it will offer a dynamic platform for stakeholders to collaborate, share insights, and explore emerging technologies driving transformation in the media and entertainment industry. Among the key exhibitors are first-time participants Nordlys, and Stype, alongside returning brands First Gulf Company, Akratek, and Advanced Media Trading.

Meanwhile, Integrate Middle East, co-located with CABSAT, will return for its third edition in 2025 to shed light on the rapidly evolving Pro AV and media technology sectors. As the only regional event dedicated exclusively to Pro AV, Integrate ME will present IoT and AI-driven technologies as well as the latest innovations in digital signage, audiovisual solutions, and immersive experiences that are enabling seamless coordination across industries, including education, entertainment, hospitality, and retail. It will also explore strategies to drive measurable business growth through transformative networking and exclusive market insights.

Alex Nicholl, Vice President, New Industries at DWTC, stated: "CABSAT and Integrate Middle East have firmly established themselves as key platforms for professionals, innovators, and industry leaders to connect, collaborate, and shape the future of the media, broadcast, satellite, and Pro AV industries. With these sectors evolving at an unprecedented pace, this year's editions will highlight the groundbreaking technologies and emerging trends that are redefining content creation, distribution, and immersive experiences. We look forward to welcoming global experts, exhibitors, and attendees to these events that promise to drive innovation, foster partnerships, and open new business avenues."

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try worldwide is expected to generate USD 2.6 trillion in revenue, reflecting a 5 per cent compound annual growth rate from 2020. The sector is poised for further significant expansion, projected to grow at a CAGR of 10.6 per cent from 2025 to reach USD 4.41 billion in 2030.

CABSAT: Shaping Tomorrow's Media Landscape

In this edition, CABSAT will feature an extensive showcase of satellite, broadcast, and media solutions. Attendees can expect to engage with over 450 global exhibitors, with a focus on new technologies and developments that are revolutionising the media industry. Key highlights include the organisation of Content Congress, where over 150 world-class speakers will discuss vital topics such as AI's role in the Middle East media industry, the rise of esports in broadcasting, and the surge of the Arab box office.

This year, the Content Congress will be themed 'Where Insights Ignite Change—Shaping the New Narrative of Media for the 21st Century'. It will feature a series of panels and keynotes delivered by key media industry leaders and figures, who will share their perspectives and opinions on the future of broadcast content, providing valuable insights into emerging trends.

In addition to organising workshops, product demonstrations and technology masterclasses, CABSAT will offer organisations unique opportunities to network, engage with buyers, showcase their innovations, and lead industry transformation. The event is grounded on three main pillars – Creativity, Connectivity, and Consciousness – which guide its purpose and focus. By embracing these three pillars, CABSAT aims to create a platform that fosters learning, collaboration, and networking while also encouraging creativity, connectivity, and consciousness within the media and entertainment community.

Integrate Middle East: Prominent Pro AV event for the Middle Eastern region

Integrate Middle East 2025 will showcase cutting-edge products such as interactive displays, audiovisual solutions, and other emerging solutions within the Pro AV sector, highlighting the role of technology in transforming how businesses communicate and engage with audiences. The Middle East Pro AV market is projected to grow at a compound annual growth rate (CAGR) of 6.9 per cent from 2023 to 2030 to reach USD 22.7 million by 2030. The Data Bridge Market Research suggests that the increase in demand for wireless Pro AV equipment set forth significant growth opportunities.

During this edition, Integrate Middle East will host specialised workshops, seminars, and product launches, offering industry players insights into the latest market trends, best practices, and technologies. Leading global companies will exhibit their newest solutions, creating opportunities for strategic partnerships and collaboration.

Strategically designed to emphasise the vast market potential of the MENA region, this year's Integrate ME will uncover the latest industry trends and highlight business-critical solutions across a variety of sectors. With the participation of several international thought leaders, this event will explore the transformative impact of new technologies, promote innovation, and facilitate discussions that shed light on the benefits of a well-structured Pro AV strategy across industries.

The strategic co-location of CABSAT, SATEXPO and Integrate Middle East offers unparalleled opportunities for cross-industry collaboration. Attendees will be offered invaluable networking opportunities, knowledge-sharing platforms, and a first-hand look at the latest technological advancements shaping the future of the media, Pro AV and satellite sectors.

With a history of over 30 years, CABSAT is the only specialised event that draws more than 14,000 business professionals from the MEASA region's media, content, and digital industries. Over the years, the event has welcomed the highest number of regional attendees, including engineers, system integrators, and broadcasters from the content creation, broadcast, and satellite industries, as well as content buyers, sellers, producers, and distributors. In line with its vision to provide a platform for business, networking, and knowledge sharing for the MEASA region's media markets, CABSAT continues to work with innovative content creators, producers, broadcast technology providers, and content delivery companies to identify traits of success that will fuel the growth of the industry.

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Solix Group Acquires Cobham Satcom

Cobham Group has signed an agreement to sell Cobham Satcom to an investment company, Solix Group. Cobham Satcom provides radio and satellite communications solutions and services for the maritime and land segments, delivering business- and mission-critical connectivity to a broad range of service providers, enterprises, and government customers.

"This transaction will enable us to accelerate our strategy and continue to develop and deliver best-in-class connectivity and safety solutions to our global customer segments," said Christophe Duret, CEO of Cobham Satcom. "Our capabilities and technology leadership within the maritime industry have been well established and recognized since the 1950s. In recent years, we have also demonstrated our ability to apply these competencies to develop new, critical market-leading satcom solutions for government and defense customers," he added.

Solix is a Scandinavian mid-market investment company with offices in Copenhagen, Malmö, and Stockholm. The firm primarily invests in international companies based in Northern Europe, across a diverse set of industrial sectors.

The transaction is subject to customary regulatory approvals and is expected to be completed within the calendar year, once these approvals have been obtained.

Katalyst Space Acquires Atomos Space

Katalyst Space Technologies has announced its acquisition of Atomos Space, a strategic move to accelerate and expand its in-space servicing capabilities.

The company plans to continue operating the 20,000 square foot facility in Broomfield, CO, where Atomos builds and tests its flagship spacecraft, Quark. Key members of the Atomos team will join Katalyst following the transaction, including Atomos co-founder Vanessa Clark.

The combined team will develop and launch spacecraft capable of rendezvous and docking to perform life extension, spacecraft upgrades, and space domain awareness. Katalyst will leverage the Atomos Quark spacecraft to serve missions for both commercial satellite operators and defense customers.

According to Katalyst CEO Ghonhee Lee, the company will launch a fleet of spacecraft capable of executing multiple missions:

"Geopolitical tensions and competition in space are both increasing. As a result, satellite operators need more flexibility – they can't rely on traditional methods of launching satellites with fixed capabilities and expecting them to stay relevant like they have for decades. It is critical to US national security and the future of the space economy to increase the frequency of spacecraft docking. It's our mission to accelerate that," says Lee.

Katalyst will continue to operate both in Broomfield, Colorado and remain headquartered in Flagstaff, Arizona.

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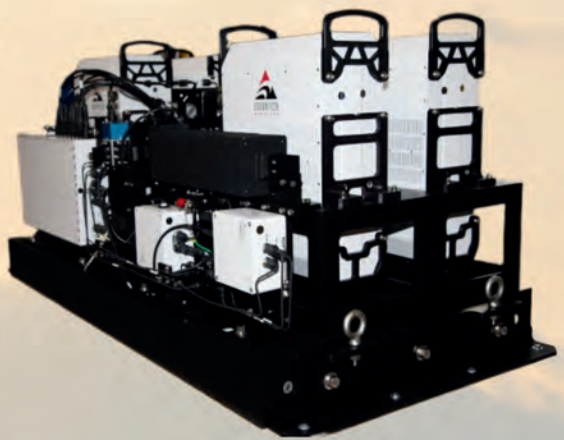

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Olivier Ricouart

Olivier Ricouart Appointed CTO of Arianespace

Paris, France, May 1, 2025--**Arianespace** announced the appointment of **Olivier Ricouart** as Chief Technical Officer, starting May 1, 2025. He also joins the company's Executive Committee.

Olivier Ricouart has 21 years of experience at Arianespace, from 1997 to 2018, during which he held various technical and program positions, including as Head of Launcher-Payload Compatibility and Vice-President of Engineering and Operations. Over that time, he worked closely with the world's leading satellite manufacturers and operators, space agencies and major Western launcher industry manufacturers.

Having participated in more than 200 Arianespace launches, his experience spans five different launch systems: Ariane 4, Ariane 5, Soyuz, Vega, and Ariane 6.

Over the last seven years at ArianeGroup, Olivier Ricouart was Chief Engineer for the Ariane 5/Ariane 6 programs, then Chief Engineer for Civil Launcher Programs, including the development and operation of Ariane and future programs.

Ricouart holds an engineering degree from ISAE-SUPAERO.

Axiom Space Appoints Tejpaul Bhatia as CEO

Houston, Tex, April 25, 2025 – Axiom Space, announced the appointment of **Tejpaul Bhatia** as its Chief Executive Officer. Bhatia takes over after serving as Chief Revenue Officer for the company over the past four years and replaces previous CEO, Executive Chairman, and Co-founder Dr. Kam Ghaffarian. Ghaffarian will continue as Executive Chairman of Axiom Space.Since joining Axiom Space in 2021, Bhatia has pioneered

Tejpaul Bhatia

landmark deals and missions, notably leading the industry's first-ever sovereign government purchases of commercial human spaceflight missions to the International Space Station, including the groundbreaking Axiom Mission-1 (Ax-1) through Axiom Mission-4 (Ax-4). He also oversaw high-impact, cross-industry collaborations, such as partnering with Prada on NASA-awarded, next-generation spacesuits for the Artemis III lunar mission, and with Nokia to integrate high-speed cellular connectivity into the lunar exploration spacesuits — establishing Axiom Space's position as a leading innovator and commercial integrator for human space exploration.

"I've been inspired by space exploration since childhood, and leading Axiom Space at this critical inflection point in human spaceflight is the realization of a lifelong ambition," said Bhatia. "We are accelerating our investment in next-generation technologies — spacesuits, orbital infrastructure, and microgravity research and manufacturing — and we're actively seeking passionate, visionary engineers, technologists, and entrepreneurs who want to help build humanity's future in space."

Bhatia brings more than two decades of experience as a seasoned technology and business leader and founder of three investor-backed startups with two acquisitions under his belt. He joined Axiom Space from Google, where he led strategic narrative and ecosystem management for Google Cloud, engaging Fortune 100 executives, venture capital firms, and startup founders, supporting over $4 billion in sales pipeline. As a founder and executive, he led startups Explain Everything, Chatwala, and Kaptur, and was an early pioneer in modern-day video streaming at ESPN, where he spearheaded the company's international digital expansion across the United States, Mexico, Brazil, and Europe.

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Astroscale U.S. Names Wesley Norris as VP of National Security

Denver, Colo., April 29, 2025 -- **Astroscale U.S. Inc.,** has named retired U.S. Air Force Colonel **Wesley 'Wes' Norris** as its new Vice President of Business Development for National Security — to meet the increasing demand for space mobility, logistics, and servicing capabilities across U.S. defense and intelligence agencies.

Colonel Wesley 'Wes' Norris

In his new role, Norris will lead Astroscale U.S.'s national security business development team and oversee customer engagement with the DOD and the intelligence community. His appointment strengthens the company's presence in national security space and reinforces its ability to deliver advanced on-orbit servicing capabilities, including in-space inspection and domain awareness, maneuvering, refueling, and debris removal to support national security missions.

Norris joins Astroscale U.S. with more than 30 years of combined military and defense industry experience. He previously held industry leadership roles in operations, program management and business development at AMMROC (Advanced Military Maintenance Repair and Overhaul Center), Boeing, L3Harris Technologies, Metrea Special Aerospace, Booz Allen Hamilton, Honeywell Aerospace and Cydecor, LLC.

He retired from the U.S. Air Force as a Colonel, most recently serving as Director of Logistics (A-4) for Air Force Special Operations Command. His career includes command of a special operations aircraft maintenance group and two aircraft maintenance squadrons, along with senior assignments in officer career management and international policy at the Air Force Personnel Center and the Joint Staff Strategy and Policy Directorate (J-5).

Norris holds a bachelor's degree from Excelsior College and a master's degree from Troy University. He also earned advanced degrees in Military Operational Art and Sciences from the Air Command and Staff College and in National Resource Strategy and Policy from the Eisenhower School for National Security and Resource Strategy.

Ronald Thompson Named Vice President of Telesat Government Solutions

Arlington, Va., April 22, 2025--**Telesat Government Solutions**, a wholly-owned subsidiary of **Telesat** (Nasdaq and TSX: TSAT), announced the appointment of **Ronald Thompson Jr.,** Colonel (retired), USAF, as Vice President of Telesat Government Solutions Growth. In this strategic role, Thompson will function as the chief growth officer, leading the business growth strategies and business development team for the company, with a mission of expanding the government user community for the Telesat Lightspeed Low Earth Orbit (LEO) satellite network.

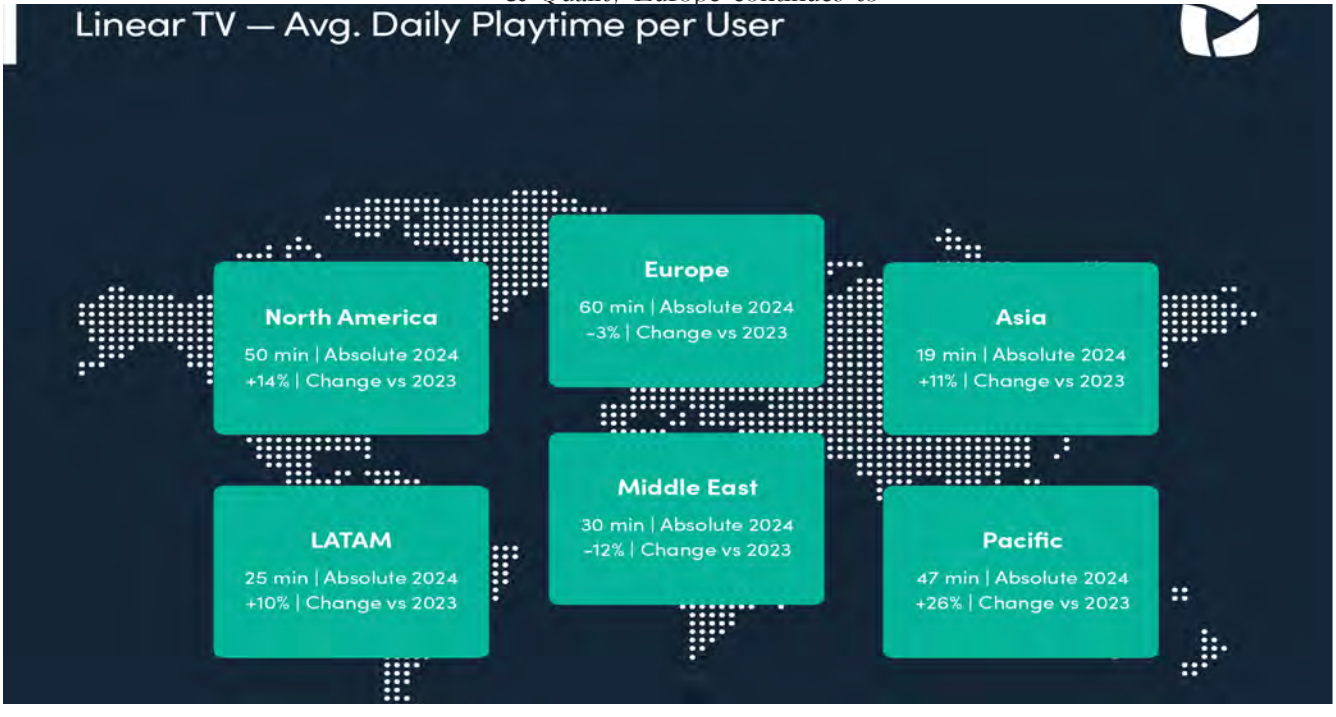
Ronald Thompson Jr.

Thompson offers a wealth of expertise, exceptional insight, and strong leadership gained throughout his distinguished career spanning nearly four decades, including 26 years of dedicated service in the U.S. Air Force, where he advanced through increasingly senior roles in space operations and space acquisition. Most recently,

Thompson was Vice President of Business Development at LinQuest Corp where he drove business growth strategies for new and existing markets. He has previously held senior-level positions at Raytheon Intelligence & Space, SSL Federal, MDA Information Systems LLC, and Analytical Graphics, Inc. (AGI).

Streaming Trends: Engagement Drops, but Quality Improves

Barcelona, Spain, April 24, 2025- NPAW has released its full 2024 State of the Video Industry Report where among its findings sow that global Video on Demand (VOD) engagement dropped after a strong H1 Q4 did improve compared to Q3. Slightly lower engagement vs 2023 with viewers watching less titles and for a shorter time. Other findings of the report include:



- Global VOD Quality improvements in most metrics Buffer Ratio (%), Bitrate, and Avg. Join Time improved vs. 2023, with Buffer Ratio showing the largest drop (-35%).
- Global Engagement in Linear TV shows slight increase Q4 did improve compared to Q3. Slightly lower engagement vs 2023 with viewers watching less titles and for a shorter time.
- Linear TV Global Quality improved across the board Significant reduction in Buffer Ratio, complemented by a strong increase in Bitrate, but offset by a slight increase in Avg. Join Time and a rise in EBVS.
- Regional Linear TV Engagement & Quality Europe continues to be the most engaged region, with ME seeing the largest drop in Avg. Playtime and Titles per User. Quality KPIs in most regions have improved.

"The 2024 insights show that streaming platforms have seen mixed results in engagement and quality. Video-on-demand (VOD) Playtime per User has dipped slightly, with fewer titles watched. The decline was more pronounced in the second half of the year, though Q4 showed some recovery. Despite lower engagement, quality metrics improved significantly - Bitrate increased and Buffer Ratio decreased by 35%. Linear TV, however, remained steady. Playtime increased slightly to 35 minutes per user, while the Number of Titles watched saw a minor drop. Quality improvements were even more significant, with a 17% jump in Bitrate and a 31% reduction in Buffer Ratio. Regional trends varied, with the Pacific region leading in engagement and Asia seeing the lowest. TV remains the dominant device for streaming, while consoles saw the highest Playtime per User. Despite some engagement declines, overall streaming quality is at its best," said Ferran G. Vilaró CEO & Co-Founder of NPAW.

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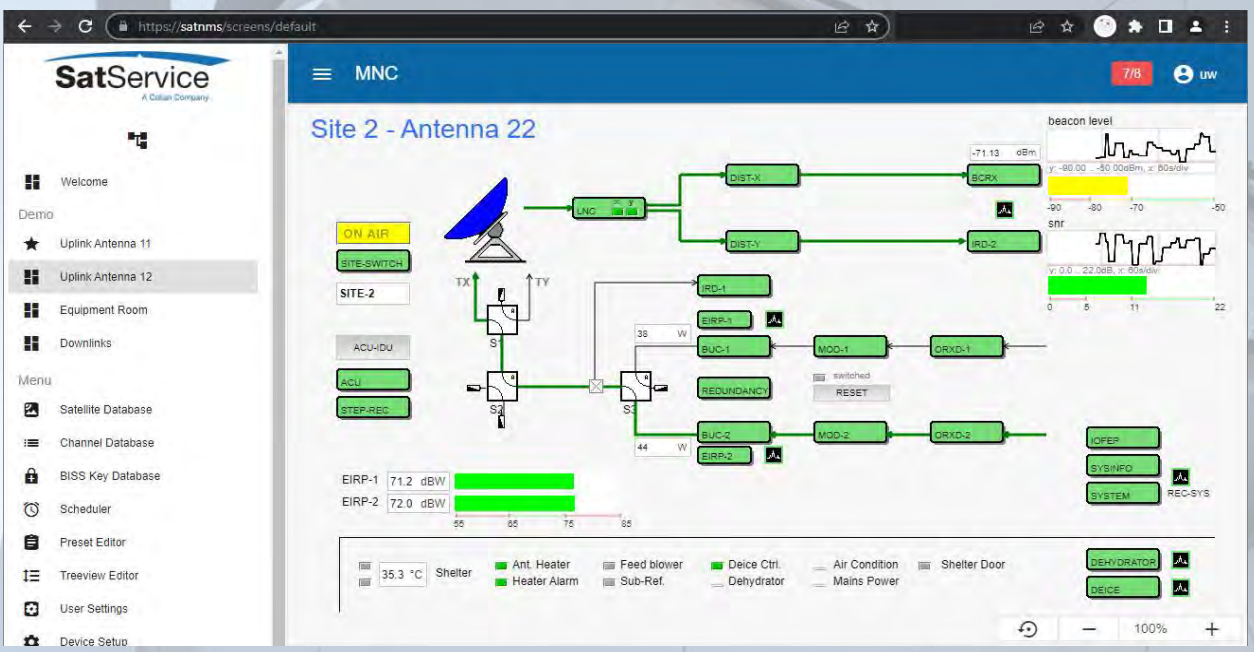

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Set Top Operating Systems Forecast 2025-2030

Bristol, UK, April 16, 2025 --Rethink TV, from Rethink Technology Research, has published its latest report, "Set Top Operating Systems Forecast 2025-2030". While the golden age of the set top is over and the industry is in managed decline, device shipments are holding up better than expected and the battle over their software foundations has intensified, accordign to the report.

Operators now face a strategic crossroads. Should they double down on the set top — with all the platform, UX, and capex implications that entails — or chart a course toward full app-based service delivery?

This report offers the tools to inform that decision.

Pay TV operators enter era of managed decline as video device strategies pivot to app-first ecosystems

The installed base of operator-supplied set top boxes will fall from 920.7 million units in 2025 to just 818.7 million by 2030, according to a new forecast from Rethink TV. This represents a decline of 11.1%, confirming that the global set top market is now firmly in a period of managed decline.

The forecast comes as operators around the world increasingly pivot away from traditional hardware investments in favor of OTT app strategies, Smart TV integrations, and broadband-first bundles. Yet the transition is far from complete. Despite shrinking sales, operator set tops will still ship in the region of 150–180 million units annually through the rest of the decade, driven by replacement demand, regional broadband disparities, and a residual appetite for managed video delivery.

North America will see the sharpest contraction, as consumers abandon legacy Pay TV offerings and shift toward retail devices and direct-to-consumer apps. Though also in decline, Europe will retain over 209 million operator set tops by 2030, due largely to its Free-to-Air culture and regulation-driven bundling. Latin America, however, will see an increase in its Installed Base of set tops, as they aid the slow creep of broadband and OTT video services.

Asia Pacific remains the largest regional base by volume but will shrink considerably as mobile-first viewing and retail smart TVs increasingly dominate. MENA, while numerically smaller, will also decline steadily, with many operators still reliant on broadcast infrastructure.

Android-based operating systems, particularly Android TV and its Operator Tier variant, now dominate new set top deployments. The combination of a fast time-to-market, integrated OTT ecosystem, and strong brand appeal has seen Android capture increasing share even as overall volumes decline. However, operators are growing wary of platform lock-in, data transparency, and long-term strategic dependence on Google.

HarmonyOS will continue to plateau as a China and APAC-centric play, unable to scale globally due to political and regulatory constraints. AOSP-based deployments, once popular in cost-sensitive markets, are losing ground as OTT app integration becomes more complex.

Meanwhile, RDK remains popular with North American cable operators, especially Comcast, which continues to promote the X1 platform. But elsewhere, momentum has stalled. Vodafone's pivot to Android TV in Europe marked a significant blow to RDK's international ambitions. Concerns over cost, complexity, and engineering overheads have forced multiple operators to cancel or postpone RDK projects midstream.


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