KUDELSKI GROUP
2021 ANNUAL REPORT

NAGRA
KUDELSKI GROUP

CONTENTS

DEMONSTRATING RESILIENCE IN A CHALLENGING WORLD

Although the COVID-19 pandemic continued to partially affect demand for the Group's offerings and disrupted industry supply chains, the Group successfully adapted its structure and operations to mitigate the impacts, reflecting the progress of the Group's transformation efforts first started in 2017.

Of the Group's four business segments, three grew during 2021 while Public Access continued to feel the impacts of COVID-19-related restrictions and lockdowns. As a result, total revenues and other operating income increased during 2021 compared to 2020.

In spite of the foregoing, overall market conditions for most of our business activities have not fully normalized to pre-pandemic levels, particularly for complex customer projects where extensive interaction and integration with clients, face-to-face meetings and travel are essential.

The COVID-19 situation in 2021 pushed the entities of the Group to constantly reinvent themselves. In such conditions, remaining agile was the key to navigate through uncertain and disruptive times. The fact that the Group's activities in cybersecurity and Internet of Things bring innovations in areas such as cyber-attacks and electric car secure access development helped keep fluidity in the business.

Digital TV saw a renewed growth, fueled by substantial advancement in EMEA and Asia, with strong profitability and successful launches of innovative solutions addressing new market segments. Recovering from a challenging 2020, Digital TV delivered a strong 2021.

As most sports and entertainment venues had to shut down due to COVID-19 restrictions, people started consuming more content on screens at home, leading to greater risks of leaks and piracy, but also demand for new ways to reach fans. As a result, broadcasters in Europe and Asia showed increased interest in Nagravision's NexGuard forensic watermarking technology. Nagravision also entered into the field of sports with the launch of live-streaming apps for the International Hockey Federation (FIH) and the International Bowling Federation, adding fan management capabilities.

In the area of cybersecurity, Kudelski Security's net revenues increased, with double-digit revenue growth in both Europe and the USA. These results reflect the growing market demand for cybersecurity. As a consequence of COVID-19, the IT ecosystem has fast become a highly critical infrastructure for business. With the adoption by companies of new forms of communication and the expansion of the work environment beyond the traditional office, the threats to that infrastructure have increased dramatically, both structurally and quantitatively.

Kudelski Security's results in 2021 demonstrate that the Group is well positioned to help protect the IT infrastructure as it undergoes rapid evolution. More generally, 2021 witnessed more and more incidents such as ransomwares, identity theft and crypto-jacking, against which Kudelski Security is well equipped thanks to the expertise of its Cyber Fusion Centers (CFC).

With regard to Internet of Things, revenues more than doubled. Since launching its RecovR asset tracking solution for cars at the beginning of the year, Kudelski IoT is on a path towards more solid growth. With most innovation in the automotive sector now based on electronics and software, Kudelski IoT is well placed to leverage its expertise in this market.

As a general perspective on the Internet of Things industry, as connected devices enter the market in staggering numbers, attacks on such devices are increasing at a significant rate, resulting in enhanced security regulations globally. As a response, Kudelski IoT has continued to focus on the development of robust digital security services and solutions and intensified its security workshops for its customers.

The year also saw Public Access activities challenged in their growth, but profitability recovered by virtue of proactive measures undertaken by management. SKIDATA however was the only business segment with a slower recovery than originally expected. This was a direct result of the continuation of COVID-19-related restrictions around the world, and although the progressive lifting of these restrictions in the second half of the year brought some positive impact on the business, it did not lead to a full recovery.

On a positive note, the health crisis showcased SKIDATA's ability to adapt as it developed new solutions to respond to the logistic challenges set by the pandemic, such as contactless access control tools for ski resorts, stadiums or parking lots as well as vaccine control technology.


Montreux Jazz Festival

LOOKING AHEAD AND BEYOND

At the core of the Kudelski Group's origins and values lies innovation, which has always been the main driver of its activities. It all began in 1951, when the first revolutionary NAGRA portable recorder disrupted the world of media, enabling reporters, sound engineers, music lovers and film directors to share with the world the sound of life.

NAGRA documented groundbreaking moments in history, such as the first Everest expeditions, the Mariana Trench exploration, the Apollo missions and the birth of the French New Wave art film movement.

Since then, the Kudelski Group has always stayed true to its spirit of innovative prowess and technological progress, which today is demonstrated by state-of-the-art solutions such as contactless access to venues and ski resorts, electric car secure access systems, digital security programs and ultra HD multiscreen content discovery platforms.

Such innovations enable millions of people worldwide to enjoy their daily activities and live their most entertaining experiences securely, safely and simply. And this is what epitomizes the mindset of the Kudelski Group: always looking ahead and bringing solutions, for today and tomorrow.

SOLUTIONS THAT MAKE LIFE SIMPLER

There are countless activities for which the Kudelski Group's innovative technologies make life simpler and safer.

Watching the latest movie at home or while on the move, reaching the ski slopes using contactless solutions, attending an exciting football game with your family, accessing car parks by just waving your hand, safely accessing your electric vehicle, following live sports events on your phone or making your banking transactions online.

Behind all these daily activities are efficient and agile solutions made possible by the Kudelski Group.

Discreet and efficient, they ensure comfort and peace of mind, providing smooth and secure access to a wide variety of essential moments.

INTERVIEW WITH ANDRÉ KUDELSKI

Chairman and Chief Executive Officer of the Kudelski Group

What are your key reflections about the Group's performance in 2021?
Despite the challenging and volatile global environment, we set high expectations for 2021 in terms of growth, profitability improvement and strengthening of our balance sheet. I am pleased that our teams were able to deliver. The Group's net debt has been reduced by more than 50% to USD 152 million. Three of our four business units experienced year-over-year revenue growth, and Digital TV even exceeded our targets. While Public Access continued to suffer from COVID-related restrictions around the world, the measures we took to reduce operating expenses for this segment resulted in a marginally positive operating income for the year.

The ability of our Digital TV business to increase its revenues and further improve profitability reflects the positive impacts of our transformation efforts to make this business more proactive and agile. Agility was also important for our Public Access business, which experienced significant delays by customers in launching new projects due to the pandemic. However, the pandemic created some new opportunities, such as demand for touchless solutions and integration of digital COVID certificates, and our teams were able to pivot rapidly to seize upon those opportunities.

At the same time, the Group was able to continue investing in our two growth initiatives, Cybersecurity and IoT, which are areas that saw accelerated demand during the pandemic that we believe will continue. For these businesses, the key to the Group's success is our unique ability to leverage our deep experience and expertise in security-related technologies to develop innovative and market-leading solutions for our customers. Overall, in spite of the difficult global economic conditions, the agility and resilience of our teams position the Group well for the future.

What are the important trends for 2022?
The COVID pandemic has been an extraordinary catalyst for structural change in our society. In particular, two rapidly developing trends emerged during the pandemic that present important growth opportunities for the Group: increased video consumption and work-from-anywhere. Our Digital TV business benefits from the increased appetite of consumers for video content across a variety of devices at home and on-the-go and the growing need of content owners to protect that content against new forms of piracy. Cyber-risks have grown exponentially as the number of IT functions available to employees remotely has suddenly increased. Distributed remote workforces and the resulting digital transformation across a broad swath of society have led to a dramatic expansion of the attack surface for cyber criminals that was simply not present when most employees have to work from dedicated office locations when executing operations requiring security.

Longer term, as the digital transformation of the world continues to gain speed, barriers between virtual and real worlds will become less important. As this happens, cyber-threats will spread into new areas, such as IoT and Operational Technologies (OT), which are ill-prepared today to tackle these threats. The rapid adoption of blockchain technologies for a variety of different use cases, from payments to industrial uses, is another example of the digital frontier that is under attack from both traditional and cyber-threats.

For the Kudelski Group, these trends present significant opportunities. For Digital TV, comprehensive content protection, watermarking and anti-piracy technologies are gaining traction as an important means of fighting new forms of piracy. Kudelski Security and Kudelski IoT are well positioned to protect the new hybrid world where virtual and real co-exist. In this new environment, SKIDATA will also play a key role as the bridge between the virtual and real worlds, offering technologies to support the digital infrastructure needs of real-world customers such as ski resorts, stadiums and airports.

"The agility and resilience of our teams position the Group well for the future."

How do you expect the Group to perform in 2022?

After the positive evolution seen in 2021, we expect the Group to continue its positive momentum in 2022, though the strength of our business activities will depend on the aftermath of the pandemic and the evolution of the Ukrainian crisis.

Overall, we expect a progression of the Group's revenues in 2022, fueled by Kudelski Security and Kudelski IoT. The challenge is to continue being flexible and adaptable in the face of an environment that will remain challenging and volatile.

The positive trends we are seeing, with a number of resulting business opportunities for the medium- and long-term, are encouraging. The key challenge is to find the right balance between our short-, medium- and long-term priorities. We must invest for the future, while continuing to deliver profitability in the short-term.

What is the status of the Group's transformation efforts?

Over the last five years, we have made significant progress in our efforts to transform the Group. More recently, our efforts have focused on improving collaboration among our segments. Innovation both drives our business and brings our segments together. By encouraging closer collaboration around innovation, we are enabling each of our businesses to move beyond their traditional client and technology base, opening up new market segments while also developing new solutions for existing clients. This also helps foster agility among our teams, better positioning the Group in a fast-changing market, and the diversity of opportunities is highly motivating for employees and prospective new talent.

Our focus on cross-unit collaboration has already resulted in some significant successes. For example, in 2021, Kudelski Security deployed its cybersecurity solutions at Altice and Canal+, two of the Group's longstanding Digital TV clients. Going forward, digitalization and innovation will create even more opportunities. With the structural transformation efforts we have made, we are well-prepared to benefit from these new opportunities across our business segments.

How did Public Access adapt to the impacts of COVID-related restrictions?

The lockdowns, capacity limits and other COVID-related restrictions mandated around the world have been challenging for our Public Access business over the last two years. Moreover, the lack of visibility into the future created by the extended pandemic exacerbates the difficulties our customers have in planning for new projects. Notwithstanding these difficulties, the pandemic also presented some interesting opportunities. For example, demand for the advanced contactless and touchless solutions offered by SKIDATA increased, and quick integration of digital COVID passports into SKIDATA's entry gates became a competitive advantage as stadiums, ski resorts and other event sites began to re-open. As we move into the post COVID-era, we believe demand for these types of solutions will continue, which positions us well for the future.

What are the prospects for Cybersecurity?

In a world where digitalization is accelerating and where real and virtual worlds are increasingly interconnected, cyber-risks are increasing exponentially, and the consequences of cyber-attacks are becoming more serious. That means the need for effective and innovative cybersecurity solutions and services is more important than ever. Kudelski Security is well-prepared to face this demand. With our market-leading solutions and experienced teams, we are continually investing to stay ahead of the constantly evolving cyber-threats. For the short-term, we expect continued growth in demand for incident response management services (securing operations after a cyber-attack) and for our comprehensive Managed Security Service offering.

What is the future of IoT?

We expect that our IoT segment will represent an important part of our revenues and our profitability in five years. As we are in the early phase of IoT adoption, our IoT revenues remain modest, but our involvement in promising new projects and our strategic presence at the silicon level for secure-by-design applications represent a key differentiator for our products and solutions. Our strategy is to focus our growth efforts across three product categories: turnkey IoT solutions (e.g. RecovR), our secure IoT keySTREAM platform and our secure IP core directly embedded in chips (e.g. for IoT communications). We believe this is the best approach to growing our business in a sustainable manner for the long-term.

What will be the main growth drivers for the Group in the future?

Two of our most promising growth drivers are IoT and Cybersecurity, both with double digit revenue growth potential. Not only are these markets promising, but the Kudelski Group is well-positioned to be a leading player that will help define the market.

Like many other early-stage markets, both IoT and Cybersecurity are extremely broad in their scope, and our goal is not to serve all possible industry verticals. Rather, our strategy is to offer secure integrated solutions in targeted verticals, including for customers in our traditional Digital TV and Public Access markets, while also developing key technologies as components or subsystems for our selected partners who are building secure-by-design solutions for horizontal markets.

This joint vertical and horizontal approach will benefit fundamentally from the positive synergies among the Group's four segments. At the same time, this approach will also benefit our Digital TV and Public Access businesses, as they will be able to continue growing their respective market position.

How does the Kudelski Group approach human resources?

We are a company with a rich international heritage and strong family roots, and we promote diversity, equity, inclusion and non-exclusion as being fundamental to our success, while also respecting the geographic diversity of our offices around the world. From the very beginning of our company, one of our core values has been to offer fair opportunities to everyone.

As part of our corporate culture and Swiss heritage, we are very proud of our apprenticeship programs in Switzerland, Europe and the USA. These programs are not only an important way to give back to the communities in which we operate, but more importantly they are critical tools with which we are finding and training employees in a number of areas facing employee shortages, including cybersecurity. Our apprenticeship programs have been recognized by local and national governments as an important means of opening new opportunities and providing new perspectives to the next generation of workers.

What will be the distribution to shareholders for fiscal year 2021?

Our Board of Directors considers that stability and continuity are important for our shareholders. Therefore, taking into account the Group's 2021 results and profitability outlook, the Board of Directors is proposing a CHF 0.10 cash distribution per bearer share for approval at the 2022 Annual Shareholders' Meeting, which is the same amount approved in 2021. It is proposed that CHF 0.05 of this cash distribution be treated as a return of capital.

Do you have any closing thoughts?

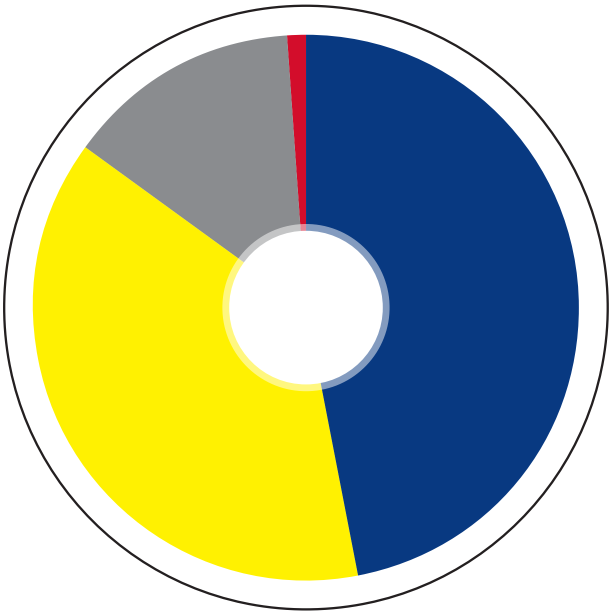
The COVID crisis accelerated digitalization across many areas of our daily lives. However, many of the trends we saw during the first year of the pandemic were actually more of an acceleration of trends that pre-dated the pandemic, such as virtual meetings and contactless payments. As the world emerges from the pandemic, we see many new opportunities to innovate in our digital world. This means new opportunities for the Group, especially where the virtual world meets the real world and where digital security meets technologies like blockchain and watermarking. The next few years will be a fascinating period, as innovation will flourish and growth opportunities abound. I look forward to the Kudelski Group being an important player in these areas, delivering innovative and market-defining products and solutions for our customers.

“Digitalization and innovation will create even more opportunities.”

KEY FINANCIAL DATA 2021

		31.12.2021	31.12.2020	Change
Total revenues and other operating income	**USD million**	**778.8**	**741.5**	**5.0%**
Operating income before depreciation, amortization and impairment (OIBDA)	**USD million**	**72.4**	**64.3**	**12.5%**
in % of total revenues	%	9.3%	8.7%	
Operating income (EBIT)	**USD million**	**30.2**	**16.1**	**88.3%**
in % of total revenues	%	3.9%	2.2%	
Net income from continuing operations	**USD million**	**21.5**	**-18.0**	
Earnings per share	**USD**	**0.2834**	**-0.4220**	
Money returned to shareholders (proposed per bearer share)	**CHF**	**0.10**	**0.10**	
Cash flow from operating activities	**USD million**	**103.1**	**132.6**	
Cash and cash equivalents	**USD million**	**284.5**	**152.6**	
Number of employees at December 31 (headcount)		**3225**	**3250**	

Revenues per segment



Digital Television **47%**

Public Access **38%**

Cybersecurity **14%**

Internet of Things **1%**

Digital Television

585 operators

400 million subscribers

Public Access

7400 customers

11 300 installations worldwide

Cybersecurity

1000 customers

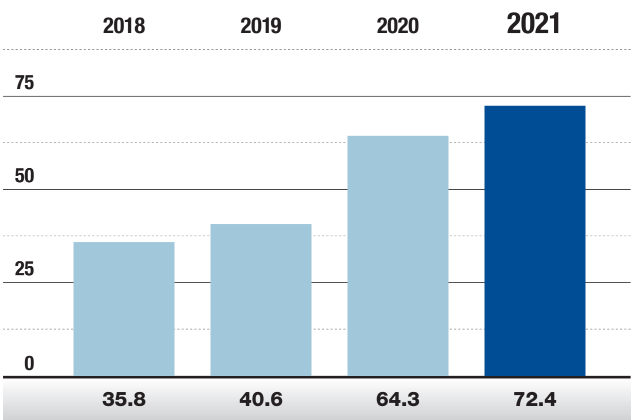
24 billion alerts per day

Internet of Things

75 customers

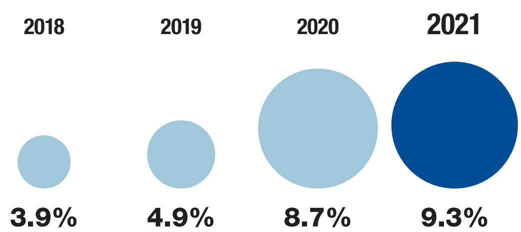
OIBDA*

In million USD



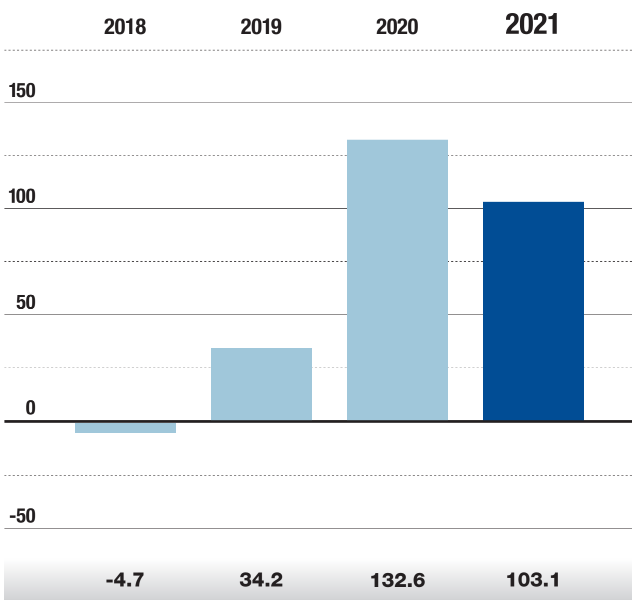
OIBDA*/Total revenues

In %



Operating cash flow

In million USD



*Operating Income Before Depreciation, Amortization and Impairment **

THE GROUP

A world leader in the creation and delivery of secure state-of-the-art technology solutions

Consumer focus

Thanks to highly advanced technologies that enable intuitive and contact-free interactions, the Kudelski Group's solutions simplify the lives of more than 500 million consumers in the world every day.

Technology pioneer

The Kudelski Group has been a pacesetter for decades. Every day, passionate and talented people develop state-of-the-art, innovative solutions that fuel the Group's intellectual property portfolio and address the world's new challenges in the smoothest and most secure way.

Engineering excellence

The Kudelski Group is an undisputed expert in securing data, content and assets around the globe with the utmost reliability. The Group's solutions enable customers to grow in their markets with the necessary confidence.

More than 500 million users enjoy Kudelski Group's solutions every day.

COMPANY PORTFOLIO

› THE KUDELSKI GROUP

Digital Television

NAGRAVISION

The Kudelski Group is the world leader in the creation and delivery of state-of-the-art technologies to secure the revenues of content owners and service providers for digital television and interactive applications across all network types. The Group's solutions enable consumers to access content seamlessly over any device through a compelling viewing experience.

Public Access

SKIDATA

The Group is a global leader in Public Access solutions. The world's leading parking facilities, stadiums and mountain resorts use SKIDATA's people and vehicle management solutions featuring the latest in contactless access solutions to improve performance and safety.

Cybersecurity

KUDELSKI SECURITY

Leveraging its long-standing expertise in securing digital content as well as fighting piracy, the Group is a provider of cybersecurity solutions and services focused on protecting data, processes and systems for companies and organizations around the world, safeguarding their assets at a time of increasingly remote communications.

Internet of Things (IoT)

KUDELSKI IOT

The Group designs and delivers security technologies and services to support companies across the IoT value chain in creating sustainably secure innovations. In addition, it delivers asset tracking solutions for automotive retail and other industries.

Over 70 years
of innovation and evolution

500 million
users

3225
employees

Worldwide
presence

HISTORICAL MILESTONES

1951

Stefan Kudelski founded the company.

Launch of the first professional portable recorder, NAGRA I, the start of a series of world-famous recorders that revolutionized sound recording.

1960

First NAGRA SN recorder, a miniature device that will be used secretly by public agencies.

1989

First encryption systems for television and entry into the pay-TV sector.

1991

André Kudelski becomes Chairman and Chief Executive Officer.

1995

First digital TV access solutions.

2001

Entering the Public Access sector with the acquisition of SKIDATA.

2009

Acquisition of 100% of OpenTV: the Group's solutions manage the entire pay-TV ecosystem.

2012

Entering the cybersecurity sector with the creation of Kudelski Security.

2016

Opening of a second headquarters in Phoenix, Arizona.

Launch of Insight, the Group's artificial intelligence and big data business performance platform.

2017

Launch of the Group's Internet of Things (IoT) Security Center of Excellence to address demand for increased protection of connected devices.

2021

The Group accelerates its transformation and continues to demonstrate resilience in the face of COVID-19 for the second year, enhancing its contactless access solutions and developing vaccine certificate control technologies.

The Group enters the automotive industry with tracking devices, as well as keyless and secure access solutions for autonomous cars.

SKIDATA's Freeflow solution allows easy access to parking and more flexibility in payment.

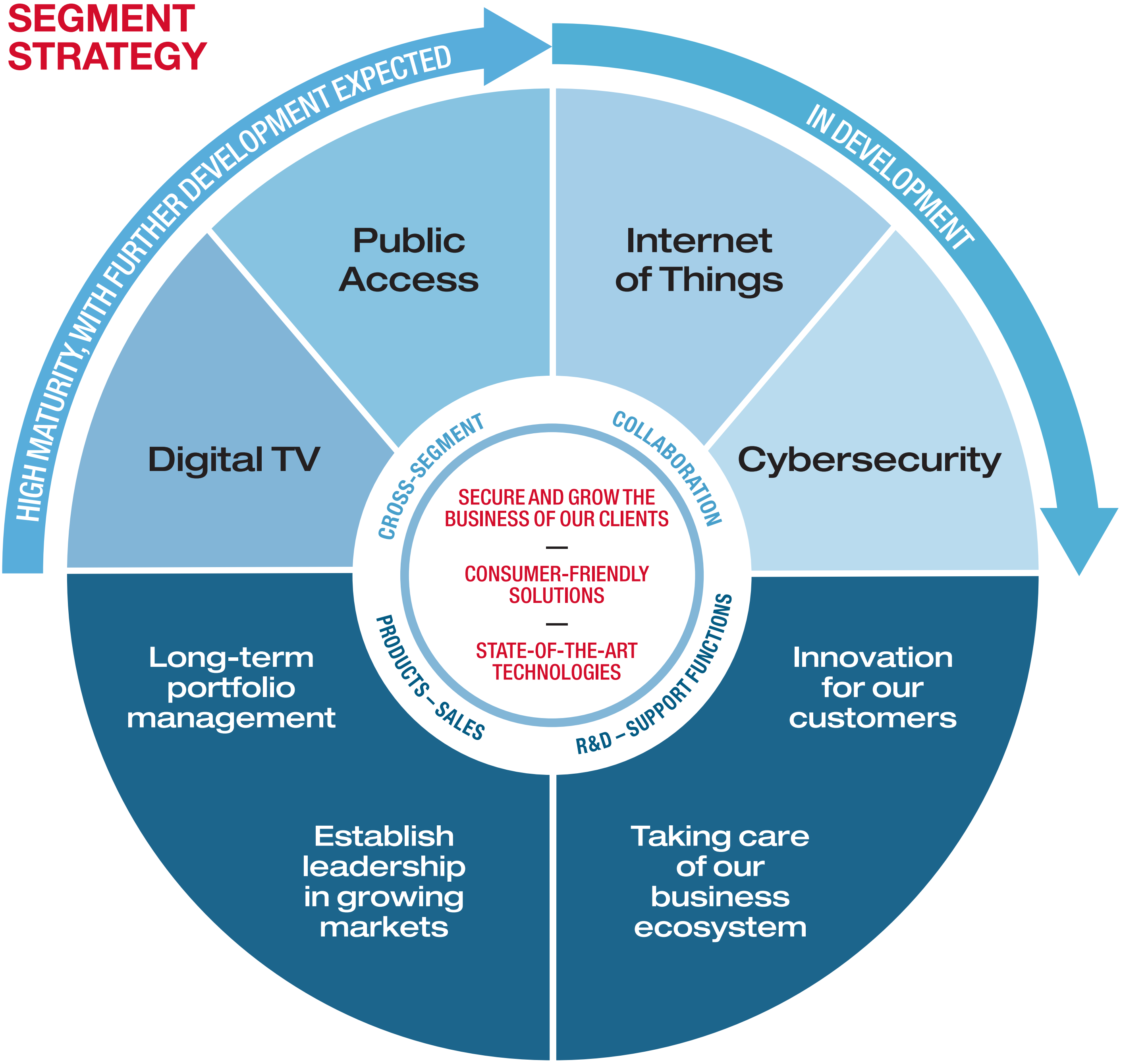
FOUR RESILIENT BUSINESS PILLARS WITH STRONG SYNERGIES

	NAGRA KUDELSKI **Digital Television**	SKIDATA KUDELSKI GROUP **Public Access**
DESCRIPTION	Long-standing expertise in content value chain with a robust product portfolio and value-added services. Enabling clients to securely expand and transform their business.	World leader in public access and revenue management solutions for ski resorts, off-street parking and events.
MAIN FOCUS	Secure platform for broadcast, broadband and mobile networks, providing personalized viewing experiences. Technology, data and expertise to improve the monetization of premium content. Flexible solutions for every kind of enterprise **Secure by design**	Integrated solutions to provide seamless, user-friendly access for people and vehicles to sites and installations such as car parks, skilifts, stadiums, arenas and amusement parks. SKIDATA solutions allow infrastructure operators to maximize their revenues. **Secure by design**
MARKET	Worldwide	Worldwide
SINCE	1951 (audio) 1995 (digital)	1977 (since 2001 in the Group)
MATURITY	High, with further development expected	High, with further development expected

Cybersecurity	Internet of Things
Leading pure play cybersecurity business supporting enterprises to accelerate secure transformation, innovate and reduce risk.	Strong skillset and services to design, implement, validate and manage secure IoT products as well as to create and deliver end-to-end IoT solutions.
End-to-end solutions to remove complexity and build board-level confidence. Highly differentiated managed security services prevent, detect and respond to threats more effectively. R&D capacity provides actionable early insight to emerging client needs.	Training, design, assessment and pre-certification services to ensure products are secure. Guarantee security for any IoT use case – from chip to cloud. End-to-end IoT solutions like asset tracking and passive keyless entry. **Secure by design**
Switzerland / USA / Europe	USA / Europe
2012	2017
In development	In development

STRATEGIC FOCUS

SEGMENT STRATEGY



KUDELSKI GROUP PRINCIPLES

Capture more value in growing domains

- Core businesses
- Smart buildings and airports
- Automotive industry

Targeted technology categories

Digitization	Blockchain	Artificial intelligence
Asset tracking devices	Decentralized finance (DeFi)	Business and security optimization
Transition to mobile	Non-fungible tokens (NFT)	Consumer behavior

CORPORATE SOCIAL RESPONSIBILITY

› THE KUDELSKI GROUP

Taking care of our employees and suppliers

We ensure optimal conditions in day-to-day life at work and we strive to increase our employees' skillsets in order to better grow together.

– The Kudelski Group's values, notably integrity and respect, promote fairness in personal and business dealings.

– The Group promotes personal and environmental health and safety by identifying, controlling and monitoring risks, adapting safety processes to best practices and ensuring appropriate response and crisis management systems are in place.

– The Group expands its training programs to develop its talent pool, promote self-development and address market needs. In this perspective, the Group created the Learning Hub, a digital learning platform.

– At the same time, the Group transformed its traditional Training Center into a Learning Lab, boosting the sharing of knowledge and the development of high-level expertise. This Lab is the result of creativity and cooperation between departments. It has proven to be very popular among employees.

– The Group cares about a good work/life balance, enabling flexible working hours and supporting healthy living through the promotion of sports and cultural activities.

– A company with a rich international heritage and strong family roots, the Kudelski Group promotes diversity, equity and avoids exclusion at the workplace, taking into account the local demography to respect its diversity.

Reducing our environmental footprint

We aim to reduce our environmental footprint through various initiatives related to energy consumption and waste management.

These initiatives include:

– Having optimized energy consumption thanks to well designed solutions and products.

– Continuously optimizing energy efficiency and promoting the use of renewable energy in buildings that we own and other locations by improving thermal insulation and ensuring natural lighting where possible.

– Giving access to clean energy through the installation of electric charging stations.

– Providing advanced video conferencing tools to optimize corporate travel.

– Promoting sustainability at the workplace by actively engaging employees and advising our customers with sustainable and energy-efficient solutions in mind.

– Working with local suppliers where possible, including for company restaurants.

– Replacing aging installations and vehicles with newer, energy efficient ones.

– Optimizing the use of energy in our data center premises.

– Reducing waste with a focus on lowering disposable material consumption.

Embedding sustainability and high-added value in our products

NAGRA's products have been sustainable by design for more than 70 years and this is a core value of our company.

– The Group's historical products, the NAGRA recorders, are renowned for their low power consumption, robustness and durability; decade-long owners of such devices are still using them today.

– Our digital TV solutions have been adopted by professionals, with unparalleled efficiency, for 20 to 30 years.

– Sustainability is built into the product design, enabling devices and solutions to be maintained easily over time.

– The Group's products are designed with high quality and reliability as well as optimal product lifecycle, extending the limits of obsolescence.

- As a key global player in digital security and a pioneer in patent protection, the Group plays an essential role in respecting and protecting content creation, copyrights and international regulations while helping people and companies preserve their reputation and develop their business.

- To address market needs in the most efficient manner, the Group constantly expands its product portfolio to include sustainable cloud-based solutions.

- The Group is a pioneer in parking management solutions offering charging stations for electric cars that are completely integrated into the operator's global management platform.

Supporting local communities

We get involved in the communities where we operate around the world including volunteering and supporting various social initiatives.

- In terms of recruitment, the Group seeks to hire local talent in order to remain as close as possible to its markets.

- The Group maintains a close relationship with local universities and high schools on both the scientific and recruitment fronts.

- The Group promotes apprenticeship programs both in Switzerland and the USA by hiring and accompanying apprentices until their graduation. The Group also welcomes interns to provide them with hands-on training within its various divisions.

- Volunteer time-off policies encouraging employees to be active members of their community are in place at selected locations.

- The Group supports charitable organizations serving the communities in which we operate.

- The Group is a partner of the Greater Phoenix Economic Council, the World Economic Forum and the Montreux Jazz Festival.

Building trust and responsibility

We actively promote fair business practices internally and with clients and partners.

- The requirement for uncompromisingly ethical behavior is fundamental for the Group.

- A fundamental responsibility of employees is to adhere to the Group's values, policies and procedures and to respect the appropriate legislation and local laws.

- The Group favors long-term relationships with partners rather than a short-term opportunistic approach.

- The Group actively supports its customers and the media industry in fighting illegal media distribution that harms content creators. It is a founding member of Latin America-based Alianza contra la Piratería de Televisión Paga, an industry association launched in 2013 that aims to fight pay-TV piracy in Latin America. The company is also involved in several anti-piracy alliances such as IBCAP (International Broadcaster Coalition Against Piracy, USA), CAOVP (Coalition Against Online Video Piracy), CAP (Coalition Against Piracy, APAC), AAPA (Audiovisual Anti-Piracy Alliance, Europe), ABTA (Brazil), Convergence (Africa), Broadcast Satellite Anti-Piracy Coalition (MENA) and Sygnal (Poland).

- The Group takes care of its employees by providing them with an appropriate work environment. It seeks to ensure that the performance and results of the Group are aligned with responsible HSE (Health, Safety and Environment) awareness and action.

- The Group encourages training and career development for women in the fields of technology and science.

- The Group promotes product architectures that enable data privacy by design and fully support GDPR structures.

WORLD-CLASS INTELLECTUAL PROPERTY PORTFOLIO

The Kudelski Group has a long tradition of strategically building a strong global intellectual property (IP) portfolio, spanning 70 years of innovative and award-winning products.

With its annual investment in research and development approaching USD 150 million, the Group's IP portfolio represents a critical asset of the company that must be developed and protected. The Group's IP organization is responsible for setting the overall IP strategy, with a focus on protecting, developing, managing and licensing its worldwide patent portfolio and supporting the Group's innovation programs.

A large and focused patent portfolio

The Kudelski Group and its subsidiaries hold a substantial worldwide portfolio comprised of thousands of patent assets in a variety of technology areas, including cyber-security, access control, watermarking, digital television and rights management, digital content distribution, and secure communication management, among other areas. Many of these patents relate to fundamental and valuable technologies with broad impact across many businesses and markets.

The Group's IP strategy, like the strategies of its core business units, continues to adapt to evolving technology trends, new product opportunities and changing market conditions. The Group regularly reviews its IP portfolio and pipeline with the goal of optimizing the strategic value of assets that are aligned with the Group's core businesses and that are expected to provide the best return on the Group's IP investment.

Deriving value from intellectual property

In 2021, the Group continued its expansion into licensing new verticals that use OTT/streaming video, such as social media, interactive fitness, retail and more traditional streaming services. In addition, it sought to renew and broaden existing agreements with select licensees and used its robust IP position to help incentivize additional business. The Kudelski Group seeks business relationships that extend beyond IP licensing. When appropriate, the Group's IP-based agreements will continue to incorporate product relationships, technology transfers and cross-licenses into the engagement.

The Group's IP will also continue to serve strategic defensive needs and be used to defend our customers.

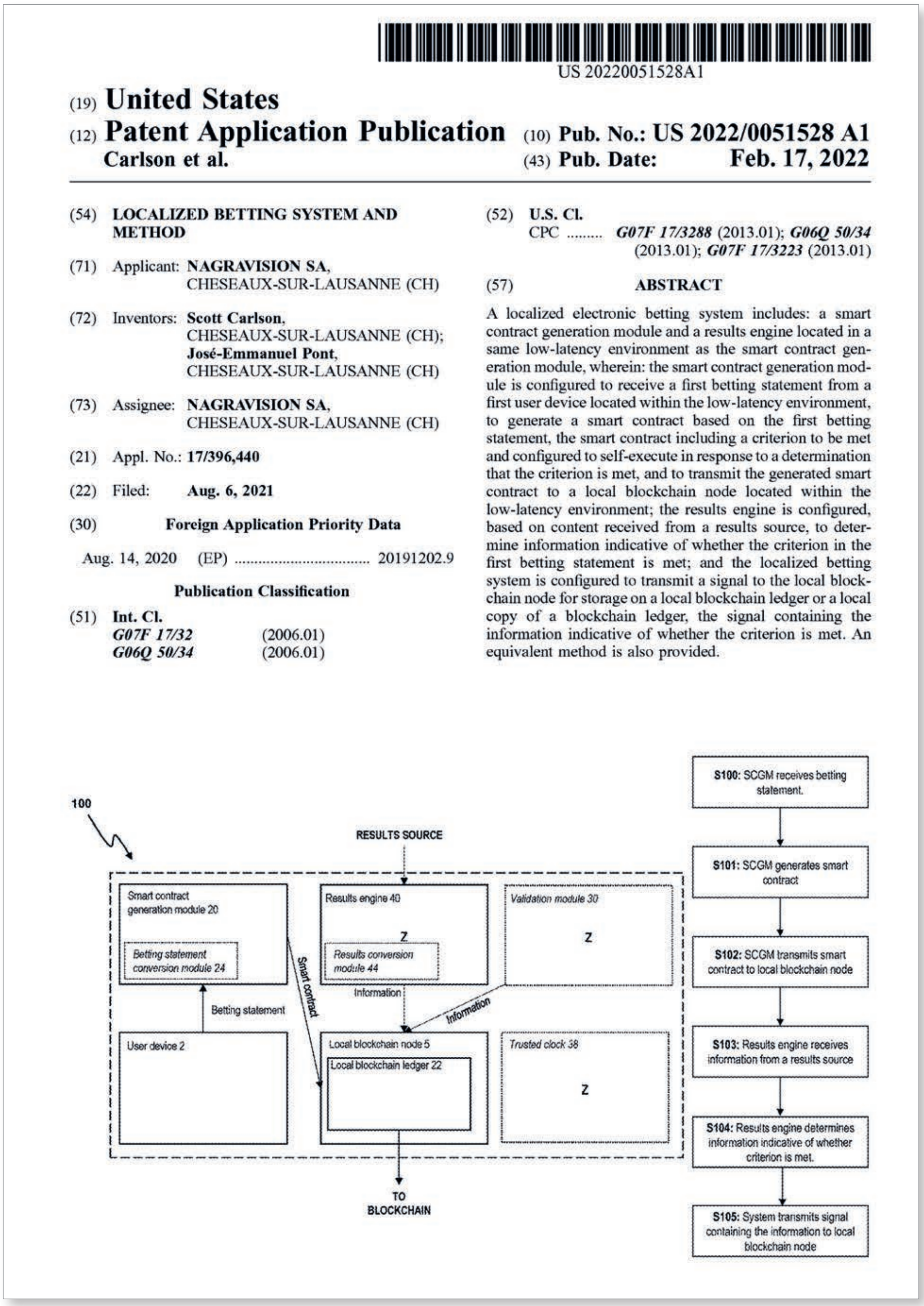
Supporting the Group's emerging businesses

In 2021, the Group's IP organization continued to support the Group's growing cybersecurity and Internet of Things (IoT) businesses, by filing new patent applications covering promising technologies being developed by the Group in these areas, including cloud security, chipset security, augmented and virtual reality, and non-fungible tokens.

Going forward, the Group will continue to execute its plans to strategically invest in innovation as well as protect and license its IP portfolio. In 2021, the Group continued to develop new licensing programs in areas like cybersecurity and IoT by leveraging its existing IP assets outside of the pay-TV and OTT/streaming video markets.

World-class licensing

By having established cross licensing with the most advanced players in the digital space, the Kudelski Group has not only demonstrated the quality of its R&D-generated IP but has gained access to the most valuable third-party IP needed for the future of its business.



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(54) **LOCALIZED BETTING SYSTEM AND METHOD**

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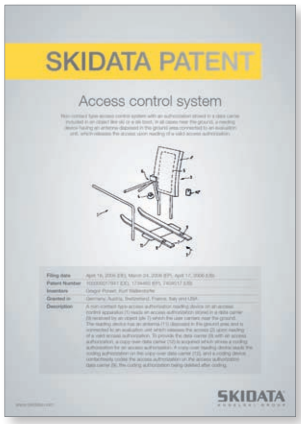
(57) **ABSTRACT**

A localized electronic betting system includes: a smart contract generation module and a results engine located in a same low-latency environment as the smart contract generation module, wherein: the smart contract generation module is configured to receive a first betting statement from a first user device located within the low-latency environment, to generate a smart contract based on the first betting statement, the smart contract including a criterion to be met and configured to self-execute in response to a determination that the criterion is met, and to transmit the generated smart contract to a local blockchain node located within the low-latency environment; the results engine is configured, based on content received from a results source, to determine information indicative of whether the criterion in the first betting statement is met; and the localized betting system is configured to transmit a signal to the local blockchain node for storage on a local blockchain ledger or a local copy of a blockchain ledger, the signal containing the information indicative of whether the criterion is met. An equivalent method is also provided.



Going forward, the Group will continue to execute its plans to strategically invest in innovation as well as protect and license its IP portfolio.

DIGITAL TELEVISION

Boosting digital transformation solutions for the content distribution

LEVERAGING OPPORTUNITIES IN AN EVER-CHANGING MARKETPLACE

In 2021, the Kudelski Group focused on helping clients deliver, consolidate and grow their pay-TV and OTT services. The continued focus on creating cross-business synergies was further strengthened as teams from across the Group's entities worked together on new propositions to drive growth.

These propositions have enabled Nagravision sales teams to have new conversations with clients and prospects, to extend the range of products, solutions and services, accelerate account-based upselling, and drive new client acquisitions.

Consumer-focused digital business enablement

Consumers are the focus of all our solutions. Experiences learned in delivering direct-to-consumer (D2C) solutions and the continued learnings from the deep relationships with long-standing clients helped strengthen the company's digital mindset.

During 2021, the teams have delivered success through D2C solutions aimed at the sports market alongside offering for the first time a direct-sales channel that allows Nagravision technology to be purchased directly and online. This allows smaller organizations and new market entrants to benefit from best-in-class solution features at a competitive entry level price, with the option to install these technologies into their existing solution offerings.

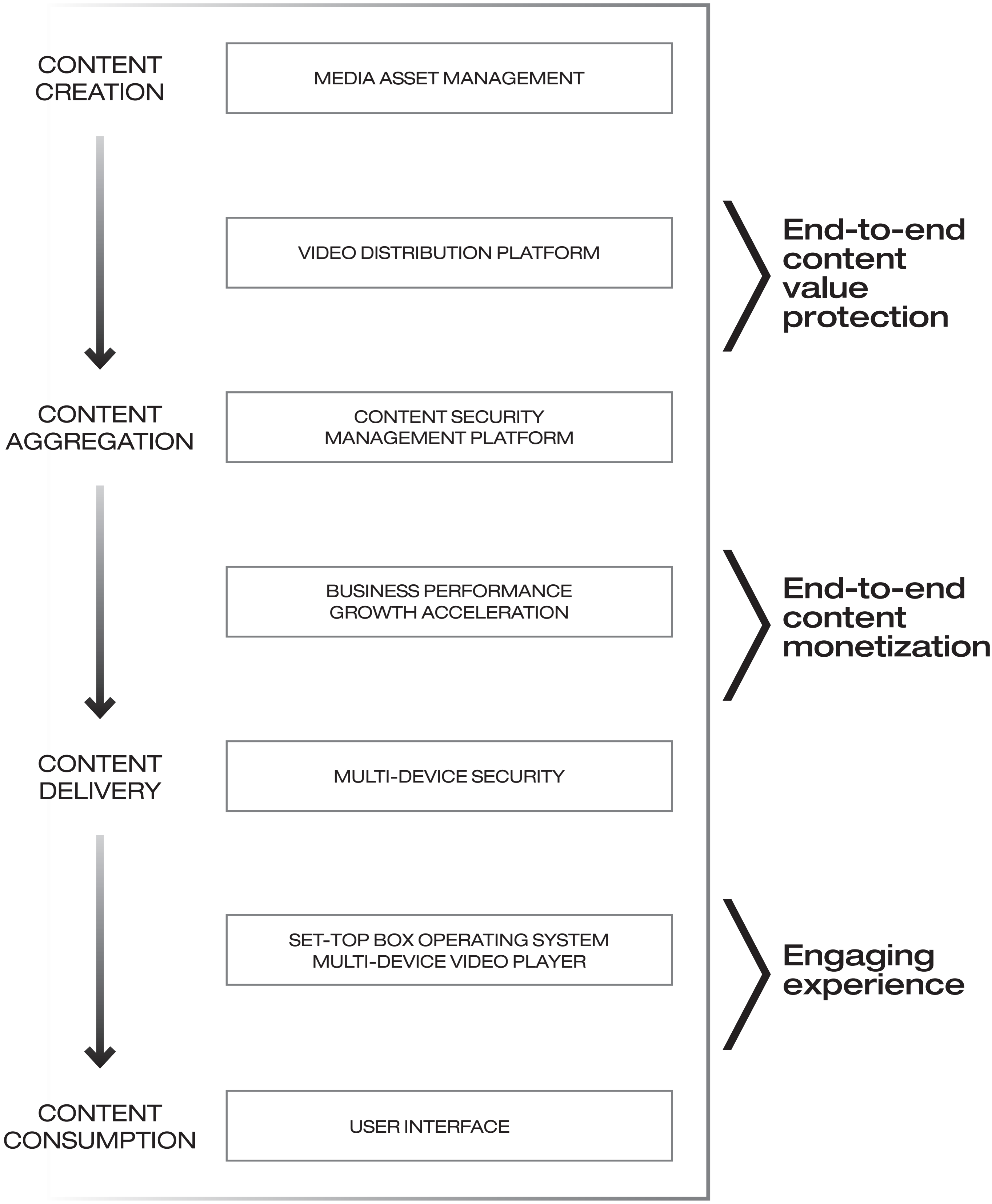
Total focus on client success

Throughout 2021, the Digital TV business worked diligently, under challenging circumstances, to ensure clients were well served as quickly and efficiently as possible, either on site or remotely. New product and service launches were a testimony to the adaptability of the Kudelski Group's teams, but the core focus remained on driving successful results for clients.

This spanned from the introduction of products, solutions and services to help increase consumer loyalty, to the introduction of a client success team focused on ensuring clients are able to expand their reach and stay relevant for the long term with end consumers.

Continued pursuit of market relevance

We continue to develop our video solutions portfolio in line with market requirements while maintaining a balance of traditional pay-TV solutions and new all-IP/streaming-based solutions. The recent expansion to solutions such as innovative direct-to-TV, home network security and OTT support, along with the fostering of cross Kudelski Group synergies, has strengthened our comprehensive portfolio. The result is continued focus on helping clients attract, serve and retain the end consumer. Helping them be more successful while the market continues to evolve is a primary goal and the driving force behind the solutions we conceive, build and deliver.


CONTENT CREATION
MEDIA ASSET MANAGEMENT
VIDEO DISTRIBUTION PLATFORM
End-to-end content value protection
CONTENT AGGREGATION
CONTENT SECURITY MANAGEMENT PLATFORM
BUSINESS PERFORMANCE GROWTH ACCELERATION
End-to-end content monetization
CONTENT DELIVERY
MULTI-DEVICE SECURITY
SET-TOP BOX OPERATING SYSTEM MULTI-DEVICE VIDEO PLAYER
Engaging experience
CONTENT CONSUMPTION
USER INTERFACE

SECURITY SOLUTIONS ARE ESSENTIAL INGREDIENTS IN A DIGITAL WORLD

› DIGITAL TELEVISION

Global online content consumption has soared throughout the pandemic, with the average daily time spent watching content now predicted to be seven hours across all TV and streaming media devices.

In this increasingly connected world, security remains a critical component of the media and entertainment sector, where investment in new content continues to remain high, driven by increased fragmentation of service offerings.

With larger consumer connectivity comes increased access to content through multiple devices. This greater surface area provides content and service piracy with multiple attack points. As for the continued migration to the cloud, it generates further cyber-attack opportunities for those intent on illicit access to content and customer data.

Nagravision's digital security solutions: a way for video service providers to protect their content, regardless of the device.

Delivering pay-TV solutions that solve market needs

VIDEO DELIVERY

Nagravision continued to expand its security portfolio with innovative, next-generation solutions across the video delivery ecosystem. We have been helping major broadcast clients in 2021 to adopt solutions to monetize their services in an increasingly aggressive competitive backdrop. Such solutions have included new cardless deployments that have also been used to secure Android TV boxes as clients have increasingly moved to a more aggregated solution offering. Our value proposition meets operators' need to secure content across this more extensive distribution network through a diverse set of technologies such as watermarking and anti-piracy.

DIRECT-TO-TV: LOWERING ENTRY BARRIERS FOR CONSUMERS

Nagravision and Samsung co-developed and introduced to the market in 2020 a direct-to-TV solution called TVkey Cloud, which puts premium security in the TV's chipset and enables easy onboarding of new pay-TV users on retail-available Samsung TV sets without the need of a set-top box. The first operator to launch TVkey Cloud was HD+ in Germany, with additional operators in Europe, LATAM, and APAC expected to launch with TVkey Cloud later in the coming months. The TVkey Cloud specification is generally available on commercially reasonable terms to those interested in implementing the solution.

With increased pressure on chipset supply chains, this approach is opening new retail channels for operators, while providing them with a secure and cost-effective way of increasing the breadth of their consumer offerings to new devices and expand their customer reach thanks to lower entry barriers for consumers.

During 2021, we saw increased demand for our direct-to-TV solutions. The quest for greater audience reach to previously non-addressable consumers, alongside the opportunity to enable impulse subscription has driven this level of interest.

HD+ Ghana was able to provide its subscribers with 4K/UHD access to the delayed Euro 2020 finals thanks to TVkey. This was not only the first 4K/UHD broadcast on the African continent, but it also meant that HD+ was able to quickly roll out a premium proposition to attract new subscribers without the cost and lead time of developing and delivering a new set-top box.

SECURE STREAMING

The impact of piracy on the value and creativity of content development was still as significant in 2021 as it has ever been. The increase in number and sophistication of piracy threats is also impacting the OTT world and affecting operators' growth. Our team has identified this issue and worked with partners and clients to develop product and service offerings to take the market beyond traditional DRM. This has led to the launch of an industry framework called Active Streaming Protection that includes forensic watermarking, anti-credential sharing, advanced security features, app protection and more comprehensive anti-piracy measures.

Today's industry transformation occurs at different levels across the various digital television sectors and speeds in regions, countries and continents. With its extensive global expertise in pay-TV and cybersecurity, the Kudelski Group continues working for tight alignment across content protection, anti-piracy and cybersecurity to lead the digital business transformation.

ANTI-PIRACY

2021 saw several new challenges faced by the industry regarding the distribution of new release content. With cinemas forced into dormancy by the pandemic, studios sought to distribute new releases via their direct-to-consumer solutions to premium-pack subscribers. Whilst adding customer value, this also provided pirates with a new hunting ground that has continued to destroy legitimate revenues and lure consumers away to illicit services.

Nagravision's anti-piracy services are designed to remove, disrupt and block pirate offerings from the Internet. Working with industry partners across the media and entertainment sector, including content providers, service operators, law enforcement, investigators and coalitions such as Alianza in Latin America, Nagravision provides unrivalled intelligence to ensure that the perpetrators of piracy are brought to justice. In 2021, we supported the publicized Operation 404 in Brazil which is now in its third phase of action against piracy in Latin America.

CREATING A FIRST-CLASS DIGITAL ENTERTAINMENT HUB

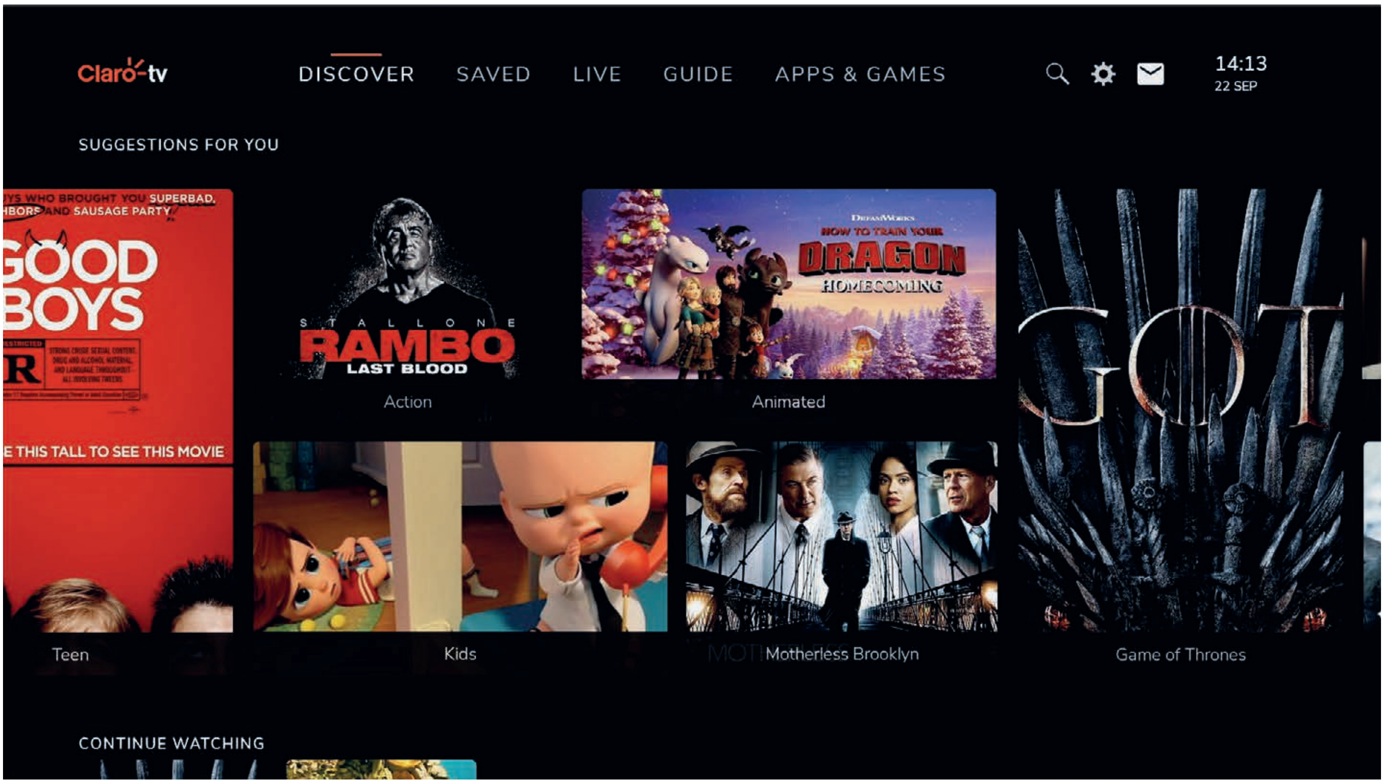
› DIGITAL TELEVISION

The need to better understand the multiple dimensions of consumer behavior has led Nagravision to continuously develop solutions for better, more efficient ways of consuming digital content.

By creating solutions to aggregate multiple content sources into an integrated simplified offering, Nagravision helps video service operators retain their customers in a market flooded with innumerable streaming offerings.

As digital transformation blurs the lines between traditional pay-TV and OTT/streaming, our teams have created hybrid content management and distribution platforms that are designed to aggregate the content of other streaming services in addition to the distribution of the operator’s licensed content.

This approach is designed to simplify the growing complexity being faced by consumers. By drawing consumers towards more coordinated offerings that deliver a broad range of aggregated or even super-aggregated entertainment content, operators are increasingly migrating themselves from pay-TV provider to digital entertainment hub provider.



Provided by Nagravision, Claro Colombia’s new aggregated service was launched in May 2021.

Delivering pay-TV solutions that solve market needs

DIGITAL ENTERTAINMENT HUBS

Nagravision clients in this segment understand their strength, market reach and brand power. Their new service offerings are designed to ensure consumers are well informed, well connected, and well served. Further, well presented personalized and centralized content offerings deliver subscriber value when compared to the extensive range of new-to-market fragmented content offerings that are flooding the market. Creating a coordinated digital entertainment hub that delivers a range of movies from diverse sources, but also TV, music and gaming content is crucial to ensure simplicity of service and subscriber retention. Throughout 2021, Nagravision has worked with clients across all major regions to bring such solutions to market.

One of Nagravision's major clients, Claro Colombia, launched their new aggregated service in May 2021. This Android TV-based device enables Claro Colombia's subscribers to watch the content they want, when they want, with advanced services including video-on-demand, start-over, catch-up TV, cloud DVR, and remote-control voice assist. It provides a dynamic user experience that aggregates and bundles third-party apps and services, including Netflix, which is built in. Subscribers also have the option to have their Netflix account charges posted directly to their Claro monthly bill, positioning the Operator as the prime aggregator for all digital entertainment needs through a single, Claro-branded app. Claro Box TV, powered by Nagravision's OpenTV Video Platform, also allows clients to access more than 300 applications from Google Play and all Google services available on Android TV via a single device.

CHAMPIONING THE VALUE OF LOCAL CONTENT

In the USA, Nagravision has been working with regional and municipal telecommunications providers to activate solutions that not only deliver major domestic and international content but also feature hyper-local content important to their specific markets. Powered by the OpenTV Video Platform, these solutions allow smaller operators to provide a differentiated and localized proposition to subscribers and compete against national providers. Further, they deliver a seamless cross-device user experience and a fast time-to-market which allows the acceleration of the operator's business transformation goals and provides a relevant and aggregated solution for their customers.

ARTIFICIAL INTELLIGENCE AND DATA TO DRIVE BUSINESS PERFORMANCE

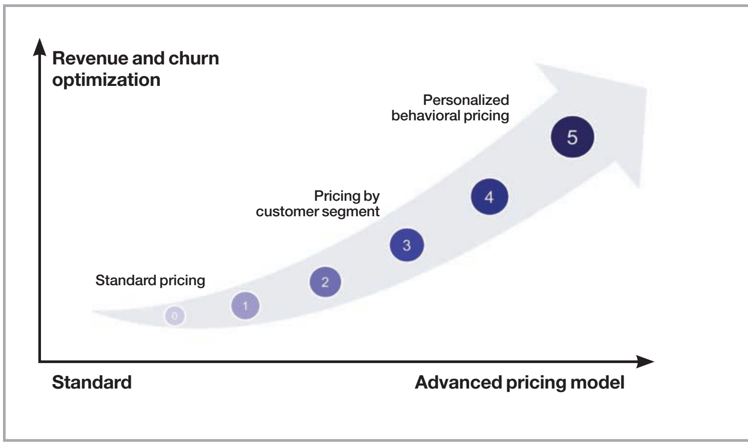
Operators are undergoing a fast transformation due to evolving consumer behavior and competitive dynamics. They are reinventing themselves by bundling a variety of services that they package for consumers, leveraging their strengths in delivering and supporting services to the home.

This transformation brings on new challenges for subscriber retention and revenue generation. NAGRA Insight is a product that supports tier-one operators in this challenge, by leveraging the wealth of data that operators have access to and recent advances in data science and AI.

Using proprietary AI technology, NAGRA Insight creates, for each individual subscriber, a personalized digital twin that reacts just like the actual subscriber in response to actions by the operator. The system then simulates scenarios of actions for every subscriber, predicting the impact on churn and revenues.

NAGRA Insight then automatically implements the personalized offer for the right set of services at the right price. This results in AI-driven operations that are optimized to best serve the operator's strategic goals, such as improving retention or increasing revenue, while increasing customer satisfaction.

The challenges and needs of these multi-service operators are unique. This represents a large market that Nagravision is very well positioned to serve with its unique solution that has proven to deliver strong bottom-line impact to its customers.



Operator pricing model maturity scale created by NAGRA Insight.

NEW GROWTH OPPORTUNITIES FOR OPERATORS

› DIGITAL TELEVISION

Nagravision's broad solution portfolio enables operators to add new services to keep consumers engaged and increase brand loyalty. We have anticipated the need for unified digital home management solutions for media and entertainment as well as business services in the work-from-anywhere era.

While video service operators are looking to address the broader needs of their subscribers and to position themselves as the center of the "digital home", Nagravision's comprehensive ecosystem of solutions enables them to manage their offerings, irrespective of network type, through unified security and distribution platforms, and to be able to add further services as their business scales and evolves.

Technology transformation and innovation

The continued endeavor to discover and implement transmission technologies has seen the rise of the next generation of technologies such as 5G and ATSC3.0. The US market is about to overhaul its over-the-air broadcast business to offer what has been named NextGen TV, which is essentially secure IP over the air. It will allow the entire country to provide a more flexible service capability with enhanced consumer offerings. Elsewhere, broadcasters looking to increase their reach are focusing on direct-to-TV solutions that remove the need for the set-top box but deliver an identically branded experience on a smart TV.

Developed jointly by Nagravision and Samsung, TVkey is a game-changing direct-to-TV solution that allows instant purchases by consumers, while delivering the same level of content security and reliability that would be seen on a traditional set-top box. This unique platform combines the best of both worlds, encompassing consumers' fast and immediate access to premium content with state-of-the-art security, branding customization and feature-rich services like (S)VOD, Catch-up or Start Over.

At the forefront of pay-TV evolution

While content aggregation has been the mainstay of pay-TV solutions for many years, the composition of such aggregation is changing, mainly due to the content market fragmentation. As a result, more direct-to-consumer and aggregated solutions are becoming available to consumers. Anticipating this market evolution, we have developed our OpenTV Video Platform solution, a unified hub for streaming propositions, either as a set of solution building blocks or as a turn-key solution designed to accelerate the digital and business transformation goals of operators and deliver a rich feature-set and fast time to market. This platform enables pay-TV operators to migrate to a digital entertainment hub approach, bringing together their own licensed content, local content and third-party streaming services into one overall operator-branded offering.

Strengthening anti-piracy intelligence

Nagravision is very active in the global fight against service and content piracy. There is a need to secure content across today's extensive distribution network through a broader set of technologies such as watermarking and anti-piracy services that include intelligence monitoring, IP blocking, and legal investigation services.

Radiotelevisione italiana (RAI) adopted NAGRA NexGuard forensic watermarking for premium content distributed to consumers via the RAI OTT web and app service. RAI also uses the Nagravision anti-piracy services platform to provide the crawling engine to monitor the web and pirate IPTV services, searching for illegal publications of the original content. The crawled content is then inspected to detect watermarks and validates when content is illegally redistributed. This system also provides data insights into illicit activity.

Business-focused security

Long seen as critical yet distinct parts of an operator's technology portfolio, the adoption of the cloud has witnessed the evolution of security solutions to become modular and integrated within core business management platforms. This has allowed business-value to be derived and affords operators the opportunity to create richer propositions through which to serve the varying demands of their subscribers, drive retention and grow revenue.

Nagravision's Active Streaming Protection management solution offers video service operators a highly scalable, multi-DRM security platform that can integrate rapidly and seamlessly with their existing business platform and enables them to distribute content over the Internet on multiple devices with the appropriate level of protection. This innovative solution supports their journey from free to pay services with a modular and scalable approach, as user behaviors and expectations evolve, and piracy threats increase.

Greater understanding of consumer behavior

Digital transformation, economic pressures and changing viewing trends require continuous analysis of consumer needs. Business intelligence, data science and analytics are needed to help operators optimize their business for targeted propositions across all the business aspects of purchase, distribution, and content.

NAGRA Insight has contributed to creating additional revenue and significantly improved the bottom line of some of the world's largest operators by helping them to allocate marketing campaign budgets more effectively, optimize call center routing, and build personalized pricing and package offerings to improve client experience and retention.

Sports-as-a-service solutions

Sports content owners need to protect their premium content while bringing new offerings to sports fans through streaming, subscription, advertising, merchandising, podcasting and direct-to-consumer offers to bolster fan engagement. Thanks to cloud-based technologies enabling lower entry barriers, even smaller sports leagues and federations are now able to deploy their direct-to-consumer offerings to the market.

We pioneered this market by developing a "sports-as-a-service" platform with fan management capabilities that is customizable to support OTT sports streaming needs. It offers a cloud-based digital platform and business services customized to the service offering, to facilitate the bundling, management and monetization of content.

Under the brand "StrikeCloud", the International Bowling Federation (IBF) and Nagravision launched a transformative approach to fan engagement that includes a host of smart technologies to deliver the ultimate fan experience. StrikeCloud is the realization of a major expansion for the IBF and a significant digital transformation to change the way players, fans, proprietors, bowling infrastructures, merchandising manufacturers and sponsors engage with the sport.

Connected home solutions

With the expansion of connected home environments, consumers are becoming increasingly concerned about the security of their digital footprint and the risk of identity and personal data theft as their busy lives are increasingly managed through smartphones and apps.

The Kudelski Group launched NAGRA Scout, an adaptative connected home protection solution with state-of-the-art security that adapts to changing behavior and threat patterns to keep consumers safe and prevent attacks before they happen. NAGRA Scout looks after home network security while consumers stay in control. The solution enables operators to keep their subscribers happy by providing them with a user-friendly app to manage and monitor home network activity while enabling them to safely enjoy their favorite content.

2021 MARKET HIGHLIGHTS

› DIGITAL TELEVISION

Americas

In 2021, Nagravision added a major Hollywood studio to its roster of cinema clients with NexGuard Pre-Release cloud watermarking. Demand for watermarking continues to grow beyond traditional media and entertainment with Nagravision's first deployment of watermarking at a global video game platform to protect sensitive video game trailers and for law enforcement to protect sensitive witness audio. OTT watermarking expanded to new B2B customers via a strategic partnership with Brightcove. Nagravision is onboarding new technology partners to prepare for global cinema resurgence in 2022.

Nagravision has partnered with Harmonic to provide security for the video services of two major multi-service operators in the United States. Nagravision's as-a-service OpenTV Video Platform has been selected by tier 2-3 operators such as Jackson Energy, IPVConnect, QXC and 1Tennessee to provide their subscribers with tier1-like video services while maintaining a local community-centric approach.

In the Latin American market, Nagravision continues to reinforce and expand its role as security partner for Telefonica for their IPTV solution. Nagravision has also reached an agreement with a tier1 bandwidth and service provider to build an as-a-service end-to-end OTT offering to address this specific market. The solution will allow operators in the region to minimize entry barriers in a pay-as-you-grow model. The OTT service will be powered by Nagravision's OpenTV Video Platform.

Claro, the largest cable operator in Brazil, has been deploying Nagravision's connected security SSP/CONNECT solution during 2021. With this deployment, Claro is trusting Nagravision's state-of-the art security backend and security client for IPTV, QAM, hybrid and OTT use cases including Android TV. Additionally, Nagravision concluded an agreement for a multi-year anti-piracy services contract with Claro, providing the operator with a comprehensive set of capabilities to fight piracy holistically, introducing watermarking and including investigation, traffic monitoring and attack response.

Claro, the largest cable operator in Colombia, has successfully launched Claro Box, the next generation AndroidTV service powered by Nagravision's OpenTV Video Platform backend. Claro also continued to deploy NAGRA Insight's business analytics solution across different set-top box platforms, enabling audience measurement and providing Claro with relevant and reliable data to support its business decision-making process. As an extension of the original Nagravision Conditional Access System at Claro Colombia, a cardless-based system with the NAGRA PROTECT solution has continued to grow its footprint during 2021. Nagravision's cardless solution will also be deployed in Central and South American operations. With this, Nagravision continues to grow as a reference and trusted security partner for America Movil subsidiaries.

In Uruguay, Nagravision is providing Montecable with the implementation of the "Third Party VOD" feature that will allow browsing and accessing content from platforms like HBO and Fox, all from the familiar and operator-branded MC GO Live app interface. MC GO plans to add new features from NAGRA GO Live OTT Solution in 2022 such as Download2Go, Geo Blocking and session management.

A new operator in South America has selected NAGRA GO Live to replace set-top boxes for second and third screens in the home, showing the value of such a solution to reduce capital expenditures and to minimize the risk of set-top box chipset supply chain shortages.

Asia/Pacific

In India, Nagravision has won watermarking and mDRM opportunities with a major OTT operator and is in discussions with other players. Nagravision's cable and satellite subscribers continue to grow with new operator wins and the launch of Android set-top boxes.

In China, Startimes continues to grow its Africa pay-TV operation with Nagravision's Contego cardless solution and reached over 3 million active subscribers.

In South Korea, SK Broadband completed the integration of Nagravision's NexGuard forensic watermarking solution into all of its set-top box models to protect the content value chain.

In Taiwan, Taiwan Mobile selected Nagravision's NexGuard watermarking solution for its MyVideo OTT service to protect content.

In Singapore, there is continuing growth of StarHub TV+ subscribers, using Nagravision's OpenTV Video Platform, Security Services Platform and Connect Player. In 2021, the platform launched Disney+ and Amazon Prime Video OTT as integrated apps for an aggregated, unified experience.

In Australia, OpenTV Video Platform continues to support on-demand services for more than 1 million active Foxtel iQ set-top boxes, including the next generation iQ5 set-top box, launched in 2021.

In the Philippines, Cignal, the leading DTH pay-TV operator, has seen significant growth with Nagravision's cardless solution, reaching over 3 million subscribers.

Europe

Nagravision renewed its Insight service contract with Canal+ International. The renewal includes the development of new modules like channel audience attractiveness and monetization measurements. The ambition is to provide Canal+ International with a true set of data science-based tools supporting sales and marketing decisions.

Nagravision has expanded its digital security and convergent media solution partnership with Altice Group, one of the global leaders in telecom, content, media, entertainment and advertising. As part of this expansion benefitting Altice+ Group's worldwide subsidiaries – in the USA, France, Israel, Portugal, Dominican Republic – Nagravision will provide its latest-generation NAGRA CONNECT security solution as well as its watermarking solution to secure the operator's next-generation Android TV-based device.

In France, SFR, a subsidiary of the Altice Group and one of France's largest telecom operators, and Nagravision have extended their partnership and involved other French pay-TV operators to fight against content piracy and Internet content sharing, leveraging Nagravision's anti-piracy expertise based on Nagravision's watermarking products, Open Source Intelligence (OSINT), forensic analysis and investigations.

In addition, as part of the global agreement in place with the Altice Group, HOT Telecom, Altice Group's subsidiary in Israel, is leveraging the Nagravision security and business platform to extend the reach of its streaming and on-demand services to a wider range of open devices including iOS and Android phones, tablets as well as a variety of smart TVs. Nagravision is providing a seamless and unique environment to manage live and on-demand content on IPTV, hybrid broadcast, and multi-DRM OTT environments, allowing HOT Telecom to manage devices, subscribers, linear TV and on-demand products from a single system.

As part of the long-term agreement between Nagravision and Vodafone Group, the deployment of Vodafone TV has continued to grow during 2021, with the specific consolidation of Vodafone Germany. Nagravision is also actively contributing to Vodafone´s largest integration program ever, which involves the integration of fixed operators in Germany, the Czech Republic, Hungary and Romania acquired in 2019. With a large extent of these projects completed on time or ahead of schedule, Nagravision has strengthened its position as a reliable strategic partner of Vodafone. This evolution and partnership confirm Nagravision's strategy to offer a central Security Services Platform providing security services for both open devices and a range of Vodafone TV set-top boxes on an increasingly larger service footprint.

DNA is one of the largest DVB-T2, DVB-C operators and Telcos in Finland and has been a Nagravision customer for many years, operating an on-premises Contego System since 2013. In 2020, they were purchased by another Nagravision customer – Telenor ASA in Norway. DNA shortly thereafter commenced divestment of their DVB-T2 operations and recently decided to replace their on-premises Contego System with Contego-as-a-service – a project that is now almost complete.

Discovery Networks became a direct Nagravision customer in 2019 when they migrated their Eurosport Player service to use Contego mDRM. In 2020 they added the Food Network in USA to the service and in 2021 added a further operation based in Asia. All three operate as cloud services on AWS with two AWS sites per region. As part of their on-going service expansion, Discovery has merged the three independent operations to become a global video platform for both live and on-demand content.
The Contego mDRM service will therefore become a unified supplier for Discovery's services, worldwide.
The largest operation thus far has been the provision of OTT coverage of the Tokyo 2020 Summer Olympics to viewers in approximately 140 countries.

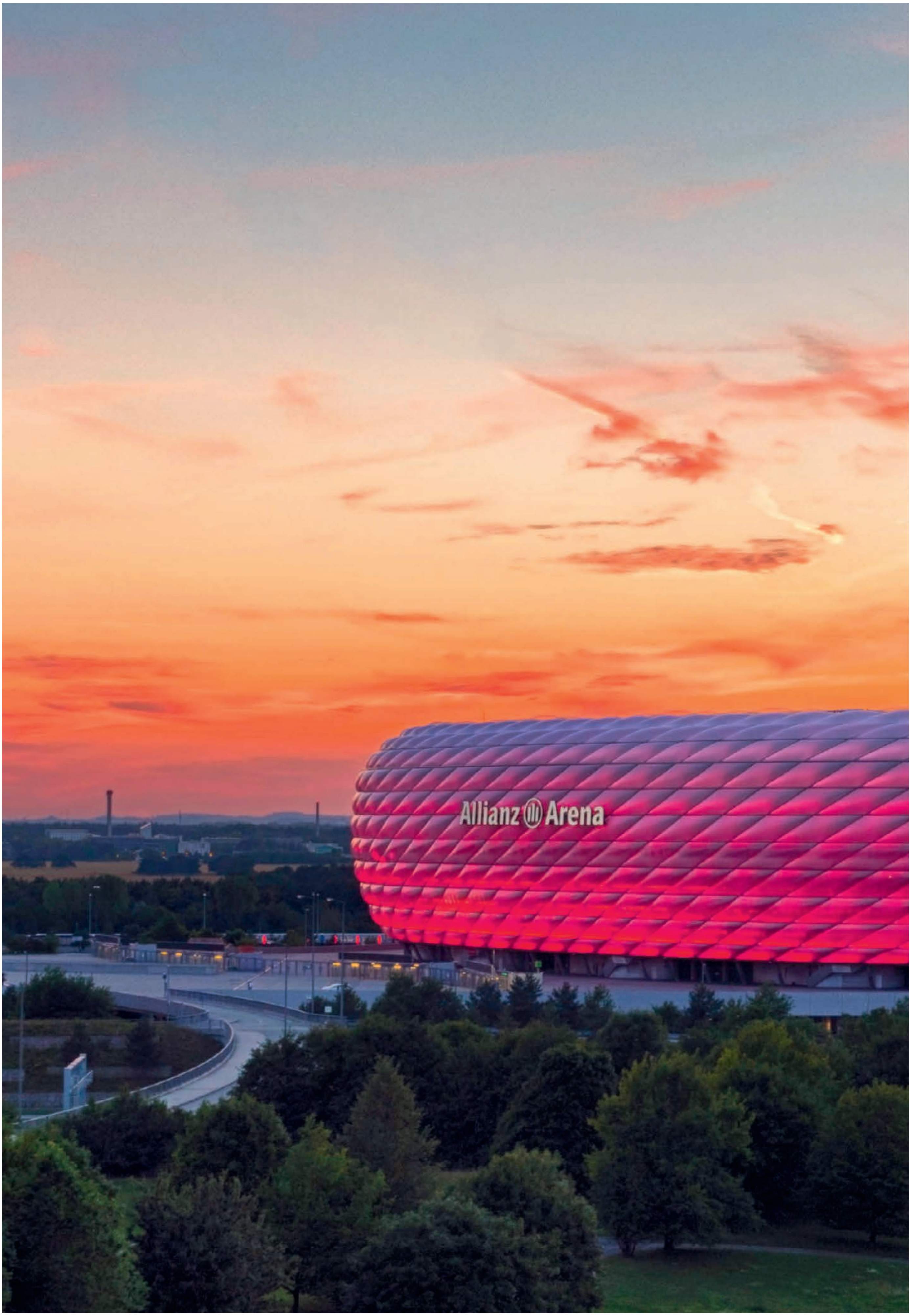
SIA Tet, formerly Lattelecom, the main TV-operator in Latvia, has decided to upgrade their on-premise Contego system to Nagravision's latest version with implementation in Q1 2022.

In Greece, Nova, a new member of United Group, has launched EON TV secured with NAGRA Contego OTT mDRM.

In Germany, Deutsche Telekom AG and Nagravision have signed a contract on watermarking.

Africa

HD+ Ghana, a subsidiary of SES Group, successfully launched 4K services based on TVkey Cloud for the UEFA European Football Championship Euro 2020.


Allianz Arena

PUBLIC ACCESS

Innovative solutions to manage access and optimize revenues

GLOBAL LEADER IN ACCESS AND REVENUE MANAGEMENT SOLUTIONS

› PUBLIC ACCESS

SKIDATA, the Group's public access business, is the global leader in access and revenue management solutions for parking facilities, ski destinations, stadiums, airports and amusement parks.

SKIDATA continues to drive the industries' conversion to cloud-based and e-commerce solutions to provide the full advantage of completely digitalized systems to their end customers.

Accelerated digital innovations

SKIDATA provides global expertise and technologies for turnkey solutions for car and people access with proven scalability and reliability. In volatile market environments, we benefit from our agile development approach, which enables quick adaptation to emerging technologies and new market needs. The changing market requirements accelerated the company's development of cloud-based solutions. Offering both online and offline consistency in data and cloud-based data storage forms an essential basis for digitalization in parking and is one of our main unique propositions.

The philosophy of providing open interfaces for system integrations has increased the ecosystem of integrated partners. The newest integration with Adyen, a global payment provider, offers fully integrated e-payment solutions. This increases the possibility for infrastructure operators to choose from a variety of solutions to maximize their revenues. This results in a new level of infrastructure connectivity where end user actions, as well as their booking and payment behavior, provide new opportunities to generate valuable data. This digital journey provides analytical data and financial reports for accurately planning business development and supporting marketing strategies.

Enhanced user experience

The use of mobile applications for booking, reservation and payment by the end user has increased significantly due to the pandemic. SKIDATA was the first in its industry to deploy digital tools for enhanced user experience. Smartphones are set to become not only the new access key but also the start and endpoint for booking, reservation and payment, providing a convenient customer journey. Consistent with the increasing use of mobile transactions, this digital approach offers parking facilities, stadiums and mountain destinations the possibility to react quickly to changing requirements and win happy and loyal customers.

More market-relevant solutions

In 2021, we continued the organizational transformation and restructuring program undertaken in late 2019 to set up the organization for long-term, sustainable and profitable growth. As part of this initiative, SKIDATA worked more closely with other Kudelski Group business units to leverage synergies, resulting in the delivery of more advanced solutions to customers. For example, combining SKIDATA's access solutions with Kudelski Security's cybersecurity offering enabled SKIDATA to provide operators with enhanced data security and more actionable customer data. Also, the collaboration with Kudelski IoT opened up new horizons for AI-applications. The measures taken led to more agile adaptation to market environments with substantial improvements in cash flow and project delivery.

End-user experience is at the heart of SKIDATA services.

SKIDATA is focused on providing relevent solutions for parking, ski and event facilities.

More than 40 years of customer-focused access solutions and revenue management.

Providing a convenient digital journey for an enhanced user experience.

Global expertise and technologies with local representation.

SUSTAINABLE AND AGILE SOLUTIONS FOR A SMOOTH USER EXPERIENCE

› PUBLIC ACCESS

SKIDATA continued to develop new solutions, adapting its offerings to a fast-changing market. These solutions are designed to address future customer requirements derived from relevant industry trends such as e-commerce, sustainability and increased security.

Environmental protection

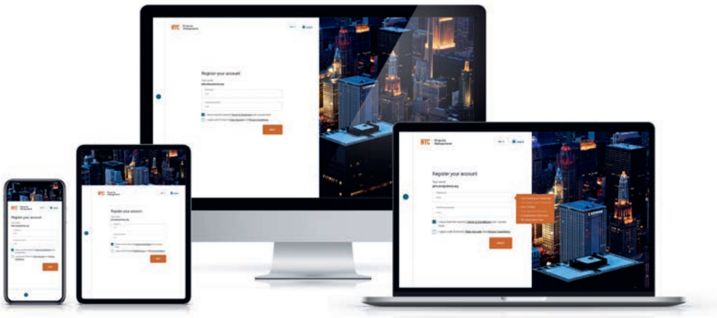
Addressing the increasing presence of electric vehicles, we have developed an integrated parking management solution enabling drivers to pay for charging and parking at the same time. This digital, all-in-one solution enables parking operators to provide convenient bundle offers to their e-mobile customers and reduces the amount of hardware needed.

Furthermore, the reduction of consumables remains an important target. Millions of paper tickets can be saved every day with the development of comprehensive digital solutions, such as using the smartphone as your key to access with Bluetooth, low energy or NFC technology. SKIDATA's newest Freeflow parking solution using license plate recognition for access without barriers does not require any physical ticket.

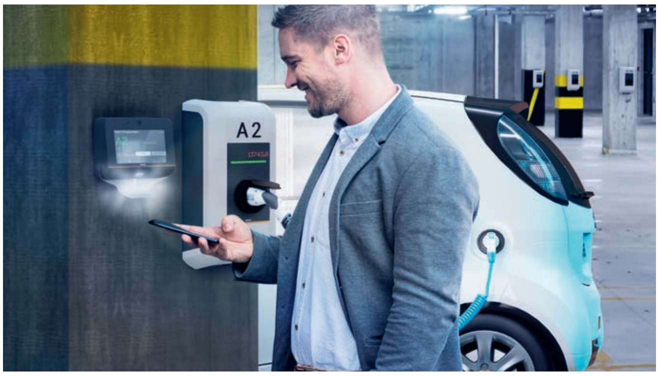
A prime example of replacing plastic materials with renewable primary products is the transition to consumable products made of FSC-certified paper or even wood – such as SKIDATA's keycard pure, a ski access card made of wood, launched for the 2020-2021 ski season.

Solutions for e-commerce and e-payment

Customers are already using apps and websites in their daily life – now it's easy to digitalize the business through a new intuitive web shop. Online booking of parking slots or ski passes as well as reservation of additional services and payment of all services can be carried out in one go. Partnering with Adyen, we have spearheaded digital payment solutions in the industry. E-payment as a fully integrated service in SKIDATA's solutions makes payment easy for customers and end users while delivering valuable data. Analytics on customer behavior can be used to adjust marketing strategies.



SKIDATA digital journey starts with any device.



Parking and EV charging solutions can be paid in one go.

The digital skipass on the smartphone thanks to the Mobile Flow Solution.

Touchless solutions for parking facilities

E-CHARGE
The rising market share of electric vehicles (EV) led to an increased demand for EV-charging solutions. Our solution enables parking and EV-charging fees to be paid in one go using the same identifier, with no extra ticket required. This scalable, easy-to-operate solution enables operators to expand their offering while maintaining full control over their operations.

ALL-IN-ONE PARKING MANAGEMENT SYSTEM WITH FULLY INTEGRATED E-PAYMENT
SKIDATA's ePayment solution is a all-in-one platform that combines reliable, future-proof parking management with a fully integrated, constantly updated and secured software for convenient payment processing, offering flexibility in payment options.

Touchless solutions for ski destinations

MOBILE FLOW
SKIDATA offers a highly convenient alternative to the classic ski pass: a 100% digital version for the smartphone, both for Android and iOS phones. The skier buys a ticket online, activates it once and receives free access all day long via Bluetooth technology. The smartphone can remain in the pocket for ski lift access.

CHANGING COVID-RELATED RESTRICTIONS
The pandemic has defined new levels of access control requirements for client venues. For mountain destinations, our DCC (Digital COVID Certificate) check enables seamless validation during the ski pass purchasing process.

For event venues that have COVID requirements, our digital check and e-ticket solution allows for green pass validation at the turnstile, without the need for additional staff. A distinct accreditation process provides the possibility to control admission for staff and other defined groups within the venue.

Touchless solutions for event venues

SAFE GUEST
The SKIDATA Safe Guest solution is a modular system that adjusts to individual needs and enables operators to safely host events of all sizes. For example, online accreditations and a full COVID test program allowing entry only to people with negative test results provides safety and security for guests, staff and organizers.

2021 MARKET HIGHLIGHTS

› PUBLIC ACCESS

ALLIANZ ARENA – FC BAYERN MÜNCHEN, MUNICH, GERMANY

Welcoming back fans to a full-capacity stadium

SKIDATA is the only provider worldwide to offer digital check plus green pass inspection or any other virtual control document right at the turnstile — without the need for extra staff or an additional app. At the Allianz Arena Munich, about 75 000 persons enter the visitors' area via 120 entrances equipped with the SKIDATA Flex. Gates "Event" and the DCC check software "Green pass solution".

Visitors no longer have to search their pockets or mobile apps for tickets, as access is enabled through contactless ticketing. A better experience for all Bayern Munich fans.

CITY OF STAVANGER, ROGALAND, NORWAY

Convenient parking solutions for a complete city

The city of Stavanger relies on SKIDATA parking systems for managing their parking facilities. With License Plate Recognition systems and the Freeflow Solution for entering without barriers as well as mobile payment solutions, they offer their customers convenient solutions for city parking.

With the Freeflow Solution, customers drive in and out without any barriers as the car parks are equipped with cameras. With full flexibility in payment options and fluidity in traffic, no queuing at the pay station occurs as the customers pay either immediately upon departure or conveniently from home. The best way to experience freedom in the urban environment.

THE SIERRA NEVADA SKI RESORT, ANDALUSIA, SPAIN

A joint future proof solution for an iconic destination

The Sierra Nevada ski resort in the south of Spain is situated only 27 kilometers from the city of Granada and 100 kilometers away from the Mediterranean coast. That way, it is possible to enjoy skiing in the mountains and swimming in the sea on the same day.

Running 110 kilometers of ski slopes, the southernmost ski resort in Europe introduced two future-oriented SKIDATA solutions: the Mobile Flow Solution for a 100% digital access experience to the ski lifts and the combined booking and payment solution for ski pass and parking ticket. The guests have the opportunity to enter the car park by license plate recognition and pay the fee at the skiosk by typing in their license plate number.

THE DUBAI MALL, DUBAI, UNITED ARAB EMIRATES
Shopping like in One Thousand And One Nights

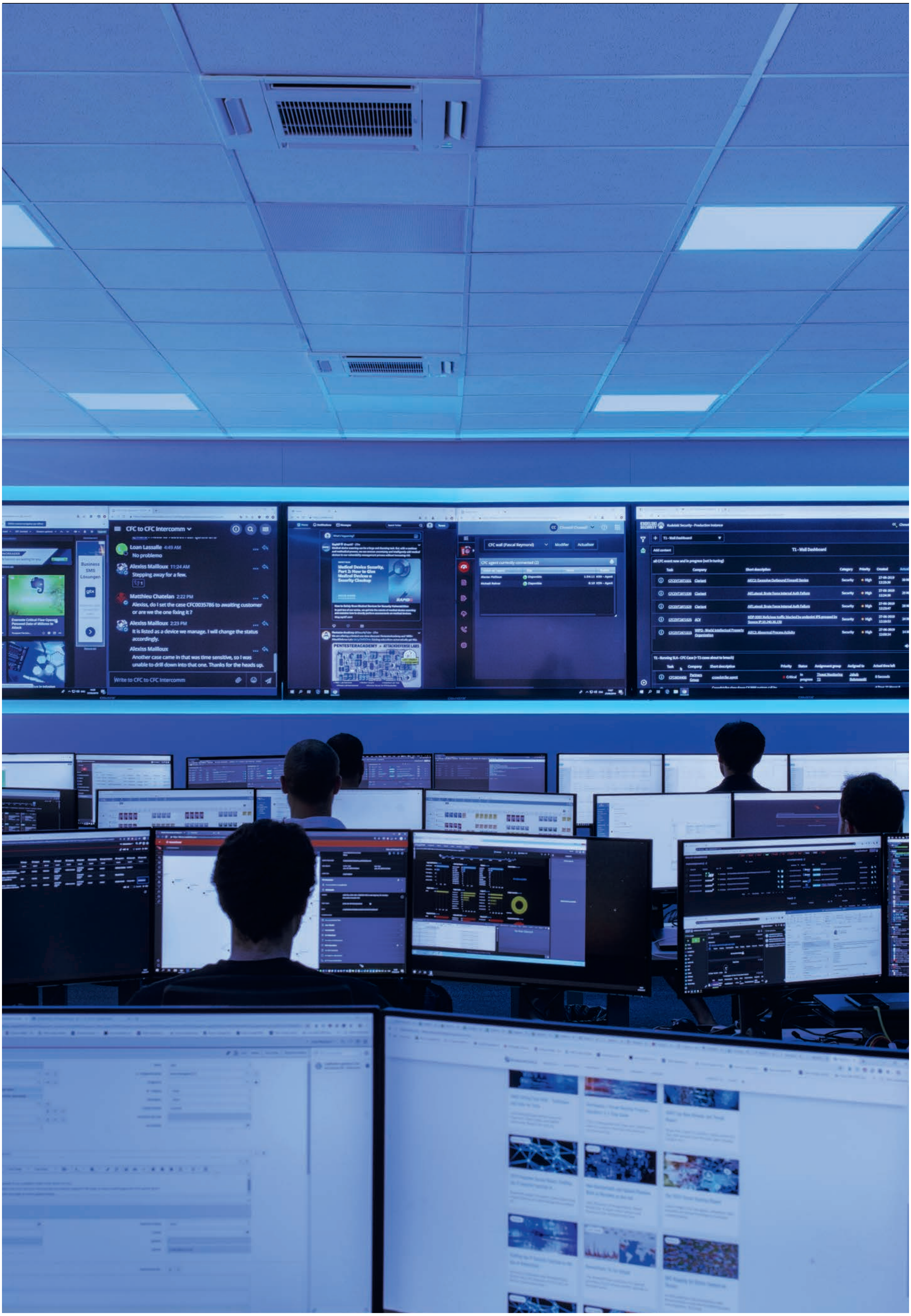
Burj Khalifa, the tallest building in the world, hosts the largest shopping mall in the UAE, the Dubai Mall, with 1200 shops. It is among the ten largest malls in the world. SKIDATA delivered the access system for the parking garage, capable of welcoming a large number of visitors: four car parks offer more than 14 000 parking slots. With this solution, visitors can enjoy a secure and stress-free shopping experience in one of the most enchanting settings a mall can offer.

Besides shopping, the guests can explore one of the largest and most stunning aquariums in the world. The Dubai Aquarium & Underwater Zoo is located inside the Dubai Mall. Thanks to our very robust Flex.Gate access solution, a large number of guests seamlessly enter the “underwater tunnel” to view more than 33 000 aquatic animals and the largest collection of sand tiger sharks in the world.

SAKHIR INTERNATIONAL CIRCUIT, MANAMA, BAHRAIN
Bahrain Formula 1 Circuit – a warm welcome to 75 000 guests

Bahrain delivers a spectacular race under the desert night sky. And SKIDATA delivers the complete solution for access control via 160 entrance points and revenue management as well as full support 24/7.

In 2004, Bahrain became the first country in the region to host Formula 1. Over the last seventeen years, the circuit has witnessed some of the most iconic moments of modern-day Formula 1, from the duel in the desert in 2014 to the thrilling opener of 2021. Thanks to our access solution, a crowd of more than 75 000 Formula 1 enthusiasts are able to safely witness such historic moments of the sport every year during the Bahrain Formula 1 Grand Prix.


CFC to CFC Intercomm
Loan Lassalle 4:49 AM
No problemo
Alexiss Mailloux 11:24 AM
Stepping away for a few.
Matthieu Chatelan 2:22 PM
Alexiss, do I set the case CFC0035786 to awaiting customer or are we the one fixing it ?
Alexiss Mailloux 2:23 PM
It is listed as a device we manage. I will change the status accordingly.
Alexiss Mailloux
Another case came in that was time sensitive, so I was unable to drill down into that one. Thanks for the heads up.
Write to CFC to CFC Intercomm

CYBERSECURITY

Solutions that position clients for secure, successful business transformation in uncertain times

HIGH VALUE SOLUTIONS TO FACE SOARING SECURITY THREATS

› CYBERSECURITY

2021 was marked by a further increase in the number of cyber-attacks against organizations from a wide range of sectors. The predominance of distributed remote workforces accelerated digital transformation at both organizational and industry levels and led to a notable expansion in the attack surface.

These new work-from-anywhere needs, combined with the commercialization of ransomware, have had a material impact on the level of business risk that organizations face, generating a sustained focus to become more resilient to cyber-attacks.

Comprehensive cybersecurity that gives organizations the upper hand

During 2021, as organizations sought measurable improvements to their risk profile, Kudelski Security saw a dramatic increase in the number of longer-term, multi-year client engagements. This move away from transaction oriented relationships highlights the changing persona of the business to a trusted partner, supporting clients at all stages of the cyber-maturity journey with products and services to help assess, design, implement and operate robust cybersecurity programs to decrease risk.

Engagements span the full range of Kudelski Security's traditional lines of business – Managed Security Services, Advisory Consulting Services, Technology, and Research and Development services – to offer solutions that deliver greater impact than a one-point transaction. Throughout 2021, the starting point for many relationships continued to be security assessments such as incident preparedness and penetration testing. These assessments identify opportunities for clients to adopt advanced security solutions such as managed security services that are delivered over the course of several years.

Increased demand for incident response retainers

During the last three years, we have witnessed a 100% growth in demand for our Incident Response and Digital Forensics services. This is largely in response to growing concern among business leaders about the impact of a breach on revenue, customer trust, and reputation, but also driven by the increasing adoption of Kudelski Security's Managed Security Services. Powering this service are the Cyber Fusion Centers in Switzerland and the USA, which in 2021detected and responded to a significant rise in ransomware, fraudulent financial operations (CEO fraud), identity theft, crypto-jacking and network intrusions.

As attacks accelerate, and automation is used to increase stealth, reduce the likelihood of being detected and improve effectiveness, our offering has evolved to keep pace. In the Cyber Fusion Center, the underpinning methodology and technology used to support clients deliver a level of precision that makes response process five to ten times faster than the traditional approach of forensics, while also reducing the volume of work needed to achieve the result.

To amplify the value delivered to clients, we expanded our incident response framework and offerings in 2021 to include preparedness, training and testing, thus generating a new standard in comprehensive incident response that will give clients the greater advantage over adversaries in the fight against cyber-attacks.

Blockchain to quantum computing: an evolving security business

2021 saw an increase in demand for our blockchain services, notably code audits, reviews, and security assessments, to help ensure advanced blockchain technology adopters and cryptocurrencies maintain secure profiles and ensure consumer confidence.

As the application of blockchain in finance becomes more mainstream, enterprises from a wide range of industries seek to explore real-world use cases of distributed ledger technologies and have partnered with Kudelski Security to secure applications against cyber-threats. In 2021, Kudelski Security signed master service agreements with major blockchains, developing a strong partner ecosystem and positioning the business for accelerated growth in accompanying cybersecurity services and consolidating its reputation as a leading security expert in an expanding market.

We also continued to invest in next generation cybersecurity technologies, including quantum-resistant cryptography and an expanding patent portfolio that spans quantum computing, blockchain, NFT, and advanced threat detection and response. A strong IP strategy positions the company for long-term success, enabling an agile and responsive innovation that will help secure expansion and consolidation of market share in an ever-evolving cybersecurity business landscape.

Addressing industry trends and changing business behaviors

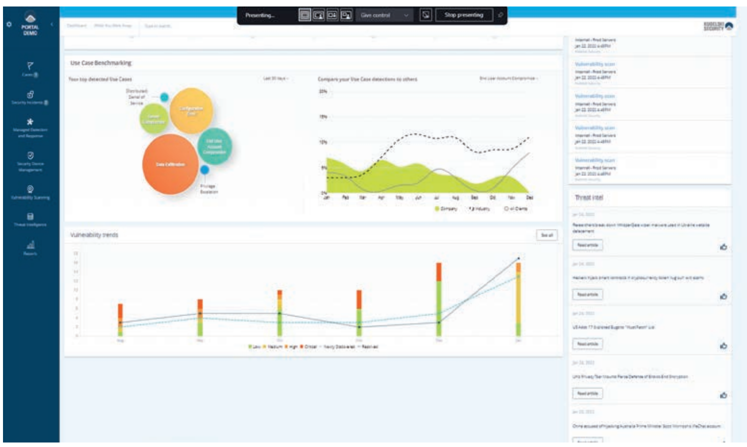
At a global level, spending for cybersecurity products and services continues to rise. Despite changing buyer and business behaviors as a result of the COVID-19 pandemic, analysts expect sector growth to remain robust. Supporting these projections, some notable industry trends include:

– Leading-edge technology – The potential of artificial intelligence, machine learning and automation provides the opportunity to decrease unit costs and help to better highlight cybersecurity professionals experience, though the overall demand will continue to grow. Within automation the focus will increasingly be on leveraging public cloud platform capabilities.

– Ongoing platform convergence – Cyber/IT systems will continue to interface closer with IoT and OT environments. This will enable new lines of business and greater efficiency but expand attack surface and create new attack vectors that will need securing, forcing organizations to re-examine security practices, and implement new policies and procedures to reduce risks.

– Sustained pressure on the Chief Information Security Officer (CISO) – The CISO role continues to evolve to a business executive function that extends from information security to physical and product security. As the work-from-anywhere economy expands, CISOs will look to invest more in cloud security, communication security, and security awareness training.

– Global security talent shortage – As the scope of enterprise security expands, security staffing shortages are expected to continue to be an issue. Combined with an increase in cyber-attacks, this scenario strains the competition for talent and highlights the need for Kudelski Security solutions that either reduce human involvement or increase efficiencies.



Kudelski Security client portal for all Managed Security Services.

2021 MARKET HIGHLIGHTS

Securing the digital transformation journey

Kudelski Security continued to expand its coverage in EMEA and USA with additional local resources to support the delivery of personalized services and solutions to its customer base.

In Europe, the business has experienced double digit growth for four consecutive years, notably in long-term contracts in Managed Security Services and strategic consulting. In 2021, the US business stabilized as efforts to transition sales from technology product reselling to a solutions-first approach gained traction, delivering strong adoption for both managed security services and strategic "as-a-service" consulting services. In addition to strong results in 2021, the business enters 2022 with a record-high backlog and a strong booking momentum across all lines of business, evidence that the new strategies are positioning Kudelski Security for further market penetration.

At the heart of our 2021 growth in high-value contracts is a commitment to delivering practical cybersecurity solutions that address the real-world challenges and enable businesses and government bodies to reduce risk.

Reducing clients' security complexity

As CISOs react to secure hybrid workloads and operate with a dissolved security perimeter, complexity has become a major threat to security posture. In 2021, we broadened our capabilities and consolidated a new approach to major advisory services, in order to deliver high-impact services that address the challenge.

- An agile framework approach for all major security domains, from vendor risk management and identity access management, to application security and data security.
- Launched in 2018, Secure Blueprint is a SaaS-based platform that operationalizes key security management functions and enables the CISOs to adopt a more strategic approach to security, understanding their target maturity levels and working out strategic plans to attain them.
- Security-as-a-service models enable CISOs to delegate to experts some operational elements of cybersecurity management that require a high level of expertise. These include compliance for regulation-heavy industries and security operations.

Cloud security

Kudelski Security's cloud-first cybersecurity portfolio strengthens the digital transformation initiatives of global enterprises using private and public cloud services and supports every stage of the cloud journey – from assessment and configuration, to compliance strategy, threat monitoring and incident response. In support of these cloud activities, in 2021 we expanded our work with the leading providers of public cloud services: Microsoft, Google, and Amazon. Mid-year, the company also launched dedicated Microsoft Security services, enabling clients to effectively consume and configure Microsoft security capabilities and add additional security monitoring to their Microsoft 365 and Azure environments.

Managed detection and response

Managed detection and response services represented a key-growth area for Kudelski Security through 2021, which saw the launch of the FusionDetect platform, a cloud-native platform that supports tailored threat detection and response across IT, OT, endpoints, and cloud environments.

The integration of leading enterprise security technologies also continued throughout 2021, with the addition of Microsoft Defender for Endpoint. This complements earlier integrations with Microsoft Azure services, Microsoft 365 Defender, and Azure Defender as well as a suite of consultancy services designed to help Microsoft enterprise clients optimize security in a cloud environment.

Application security

The demand for application security testing engagements accelerated throughout 2021 alongside an increased demand from organizations to build application security programs in support of agile development methodologies and DevSecOps practices. As development in the cloud accelerates, Kudelski Security witnesses a growth in requests from various industries, including banking and financial services, technology and software services for offerings such as assessments and operationalization support, which increase the maturity of application security programs.

2021 also saw the re-emergence of software supply chain attacks with significant impact on the economy. The recent incidents, which leveraged flaws in SolarWinds and Kaseya software for instance, served as stark reminder to the security community of the need to secure their Secure Development Life Cycle (SDLC). Our experts observed that most organizations involved in application development are still struggling to integrate security effectively into their SDLC. We continue to help these organizations embrace a framework approach and sustainable processes that will enable business and minimize risk.

Blockchain security

In 2021, Kudelski Security saw a rapid growth in demand for services supporting distributed ledger technology services and blockchain ecosystems, notably among blockchain clients in the decentralized finance (DeFi) industry and non-fungible token (NFT) market space. With growing interest in digital currencies comes greater visibility and likelihood of security attacks. Strategic contracts, notably with major cryptocurrencies and platform exchanges, have triggered an interest within specific cryptoecosystems for complementary solutions built on the core chain, for token programs and third party projects looking to utilize these blockchains.

Building on our history of providing innovative security solutions to the media and entertainment space, we are committed to bringing solutions that increase the safety and security of blockchain ecosystems. Partnerships with leading blockchain ecosystems and projects are driving Kudelski Security's product development to support NFT marketplaces and DeFi organizations with the tools they need to build and operate in this decentralized economy.

Data security and privacy

2021 continued the digital transformation trends of 2020, bringing forth new data security challenges resulting from continuing remote work and increasing adoption of cloud-first infrastructures.

In response to an increasingly cloud-first and remote work world, we are leading our clients to modernize their data security programs. Using technologies from cloud aware vendors like CASB, Secure Service Edge, and data labeling, we enable our customers to protect their data wherever it goes – not just in a physical data center or in the office. Significant among these vendors is Microsoft, who has grown their data security capabilities to rival legacy data security vendors. We assisted multiple clients in making the most of their existing licenses to protect their Microsoft 365 tenants, often their chief means of collaborating and storing data.

The transformation of how employees work and communicate has increased data security risk, and governments are responding with increased scrutiny. By helping clients respond appropriately, Kudelski Security best positions them to retain the trust of their customers, partners, and governments.

Recognition for excellence

Kudelski Security continues to earn industry recognition for excellence in managed security and incident response services that deliver faster, improved security outcomes.

- 2021 Gartner Market Guide for Digital Forensics and Incident Response Services, September 2021: recognized as a Representative Vendor for the third consecutive year

- Gartner Market Guide for Managed Detection and Response (MDR) Services: recognized for five consecutive years (2017-2021)

- Forrester Wave Managed Detection and Response (MDR) Q1 2021: named Strong Performer

- Gartner Market Guide for Operational Technology, January 2021: listed as a Representative Vendor

- Gartner Hype Cycle for Blockchain, July 2021: listed as a Representative Vendor

INTERNET OF THINGS

Where the digital and real worlds converge

PROVIDING INNOVATIVE IOT SECURITY SOLUTIONS

› INTERNET OF THINGS

As the world adapts to the extended COVID-19 pandemic, companies continue to create new connected solutions, with a focus on improving health and safety, enabling employee productivity and making the supply chain more efficient.

At the same time, governments are starting to legislate and regulate IoT security, enacting new laws and standards meant to protect consumers safety and privacy as well as national interests.

By leveraging more than 30 years of innovation in the fields of digital business models, device protection, solution architecture and operational and service excellence, the Kudelski Group has unparalleled ability to provide solutions to create, enable, sustain and protect connected devices and ecosystems.

A strategic IoT solution provider to customers

With on-going digitization of many different industries, companies are deploying connected devices and services and need to be able to trust, control, manage and update them. By protecting the device and its data, new business models can be created and sustained, and operational efficiencies can be drastically improved.

However, many companies with innovative IoT ideas do not have the expertise required to bring those ideas to market, let alone in accordance with important "security by design" principles. The result is millions of connected but unsecure devices, ripe for attack by criminals, competitors and hackers.

The Kudelski Group's three decades of real-life experience in creating, testing, deploying and protecting connected embedded systems is what makes it unique in the IoT industry. Whether helping companies create their own secure solutions or producing its own solutions like RecovR, Kudelski IoT remains an industry leader in helping secure the exponential global growth of IoT.

Designing, securing and sustaining the entire IoT product lifecycle

Kudelski IoT provides end-to-end IoT solutions, IoT security workshops, IoT product design, and full-life-cycle services to IoT silicon and module manufacturers and IoT device creators. These solutions and services leverage the Group's extensive history of innovation and operational excellence in hardware, software and ecosystem design and testing, state-of-the-art security lifecycle management technologies and services and managed operation of complex systems.

Secure by design

Each key asset within the IoT ecosystem – from device to data to cloud – needs to be carefully protected in order to ensure the long-term success of the business model and prevent theft of data. This can only be done when security is architected into the product from the beginning of the product development lifecycle.

Areas of focus

Kudelski IoT supports customers throughout their entire product lifecycle, helping them bring secure products to market, design secure IoT components, devices and ecosystems, and providing end-to-end solutions for specific markets that are secure by design.

END-TO-END IOT SOLUTIONS
Tracking & Locating Valuable Assets
Kudelski IoT is expanding into designing full, end-to-end IoT solutions that it brings to market to solve real end-customer business challenges.

Using its extensive experience in designing, securing and operating complex solutions, the company began deployment of its first asset tracking solution, RecovR, in 2021, deploying it at car dealerships across the USA. Following the successful introduction of RecovR, Kudelski IoT is pursuing expansion into international markets as well as adjacent industries and use cases like trailers, powersports, construction and recreational vehicles.

KUDELSKI IOT KEYSTREAM
Manage, Update & Control IoT Devices
Kudelski IoT keySTREAM delivers the robust digital identities required to securely manage, update and control all key IoT assets with simple integration options and APIs.

For instance, the keySTREAM solution protects data from the point of collection (e.g. sensor, camera or other device) to the application that utilizes the data, whether that data is at rest or in motion, and ensures that data is only accessible to authorized parties. keySTREAM is increasingly becoming the solution of choice for silicon manufacturers to create more secure – by design – chipsets for their customers.

KUDELSKI IOT LABS
Training, Design & Evaluation Services
Kudelski IoT trains companies on IoT security, designs secure IoT devices and ecosystems to their specific requirements, analyzes and understands cybersecurity threats to their IoT business and quantifies their potential impact. It can create tailored security designs to prevent those threats as well as evaluate the security of existing products in its advanced IoT Security Labs in Switzerland.

EXPANDED SERVICE OFFERING AND KEY PARTNERSHIPS

End-to-end solutions – RecovR

RecovR was launched in February 2021 and began deployment to car dealers across the USA. RecovR is a lot management and theft recovery solution for car dealerships that places a small, battery-powered locator device in cars, helping dealers track their inventory and find cars faster. When the car is sold, the solution is then offered to the new owners as a vehicle theft recovery solution, generating revenue for both the dealer and Kudelski IoT, and giving the consumer peace of mind and a powerful tool to find their car if it is ever stolen, borrowed, towed or misplaced.

Kudelski IoT announced multiple customer wins including The Niello Group and Folsom Lake Ford in 2021. The core technology and expertise behind RecovR will allow us to leverage the technology into new use cases and offer the RecovR service offering into other countries and adjacent market segments in 2022.

Expanded security labs services and revenue

Created in 2017, the Kudelski IoT Security Labs continue to draw new customers who wish to leverage Kudelski's extensive expertise in hardware and software security as well as security architecture and design. In 2021 the company announced the expansion of its IoT security workshops to its Phoenix facility for US customers and will continue the successful program at its Swiss headquarters as well.

These workshops help companies evaluate current and future threats to their products and learn how to protect themselves from those threats throughout the entire life-cycle of their products, especially in the face of growing security regulation around the world. In 2021, the Labs had their strongest revenue to date.

New sales partnerships

2021 also saw the expansion of the our sales channel to international sales agents like Redtree Solutions. Redtree added Kudelski IoT keySTREAM technology and IoT Security Labs services to the portfolio it sells to its large network of customers.

New customer and partner announcements

We continued to serve a large number of customers in our IoT Security Labs, offering primarily device security assessments that provide an independent report on their products' security posture and opportunities for improvement. Clients included a global leader in connected consumer products, numerous semi-conductor manufacturers, as well as US and EU telecommunications companies.

We also expanded our partnership with Spain-based Idneo Technologies to enable secure and simple accessibility solutions to electric vehicle (EV) and mobility-as-a-service clients, featuring Kudelski IoT's secure Passive Keyless Access solution. The solution is currently being deployed by EV company Canoo and by a UK-based EV truck manufacturer.

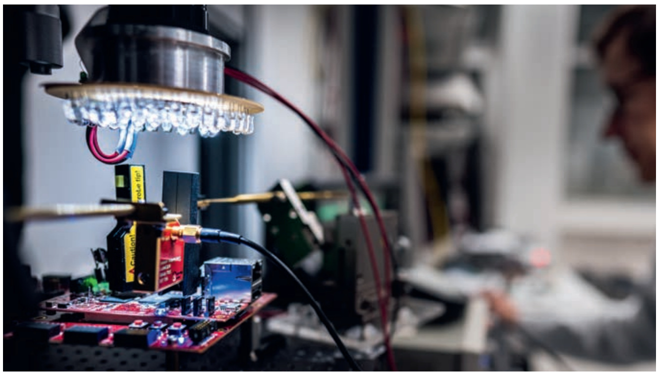
Kudelski IoT Labs continued to operate as an approved certification lab for CSPN, AT&T/FirstNet and Amazon Alexa Build-In and are starting to see increased customers demand for these services.

Recovery solutions for car dealers

RECOVR LAUNCH
Based on keySTREAM, our teams designed, built and launched the RecovR lot management and theft recovery solution for car dealers and consumers in less than one year, and it is already deployed at customers across the USA. Compared to traditional theft recovery solutions, the fully wireless RecovR solution is providing improved lot efficiency, using a revolutionary new business model that benefits Kudelski IoT as much as car dealers and car buyers.

Automotive industry solutions

PASSIVE KEYLESS ACCESS
As vehicle manufacturers continue to create more and more connected systems in their cars, governments are responding by imposing security regulations to ensure consumer safety. Kudelski IoT's Passive Keyless Access solution – adopted by US EV manufacturer Canoo and a UK EV truck manufacturer, ensures "phone-as-key" convenience is secure and meets regulatory requirements.



Security solutions for devices

NEW LABS CERTIFICATION
The Kudelski IoT Security Labs experienced record growth in 2021, helping its customers design and evaluate security for their connected devices. In addition to already being an AT&T/FirstNet, Amazon and CSPN authorized security lab, the labs were also authorized in 2021 to test the security of third-party devices integrating the popular Zoom video conferencing service.

Security solutions for wireless

U-BLOX MOMENTUM
Our relationship with u-blox continued to grow in 2021, as the customer expanded Kudelski IoT's security system into additional u-blox products. With this partnership, Kudelski IoT helps u-blox provide secure wireless technologies for consumer, automotive and industrial markets, developing chips and modules that support products ranging from sport watches to navigation satellite systems.

CORPORATE GOVERNANCE

CORPORATE GOVERNANCE

This report was prepared in compliance with the directive on information relating to corporate governance issued by the SIX Exchange Regulation and in compliance with the Ordinance against Excessive Compensation at Listed Joint-Stock Companies (OaEC). Unless otherwise stated herein, the information provided in this report reflects the situation as of December 31, 2021.

1. Group structure and shareholders

1.1. Group structure

Kudelski SA has its registered offices in Cheseaux-sur-Lausanne. The company has been structured as a holding company since 1999 and its shares have been listed on the SIX Swiss Exchange since August 2, 1999.

The structure of Kudelski SA and its affiliated companies (the “Kudelski Group” or the “Group”) is shown below – sections 1.1.1 to 1.1.3.

1.1.1. Description of the issuer’s operational Group structure

From an operational point of view, the Group’s activities are split into four divisions: Digital TV, Public Access, Cybersecurity and Internet of Things (IoT). The Finance, Legal, Human Resources, Business Development and Innovation and Corporate IT departments support the entire organization.

Each division is responsible for defining and managing its research and development, sales and marketing, services, support and operations functions, except the Internet of Things (IoT) division, which is supported by the research and development team of the Digital TV division.

The Digital TV division is organized with sales, marketing and product management reporting to the Chief Marketing Officer. The Chief Operating Officer manages operations, services and support, research & development and business transformation.

The Public Access division is comprised of three units: parking, mountain (ski) and events.

The Cybersecurity division is organized around four pillars of activity: managed security services, applied security, advisory services, as well as technology sale and optimization.

The Internet of Things (IoT) division is organized around IoT Secure Solutions, IoT Security Technology & Systems and IoT Security Services (Lab & Design).

Results by sector are presented in note 4 to the Kudelski Group’s 2021 financial statements.

Main operating companies held directly or indirectly by Kudelski SA

The list of the Group’s main operating companies is provided in note 54 to the 2021 financial statements.

Additional information is also included in the 2021 Annual Report’s key figures.

1.1.2. All listed companies belonging to the issuer’s Group

Kudelski SA, the parent company of the Group, is a Swiss holding company based in Cheseaux-sur-Lausanne in the canton of Vaud. Kudelski bearer shares are listed on the SIX Swiss Exchange (Ticker: KUD; Sec. No. 001226836/ ISIN: CH0012268360). As of December 31, 2021, the market capitalization of Kudelski SA bearer shares was CHF 187 726 796.

Kudelski SA and its subsidiaries did not hold any bearer shares of Kudelski SA.

1.1.3. The non-listed companies belonging to the issuer’s consolidated entities

Information about the company name, registered office, share capital and holdings owned by non-listed Group companies included in the scope of consolidation is shown on pages 158 and 169 of the Kudelski Group’s 2021 financial statements.

INTERNATIONAL PRESENCE*

** Indicates countries in which the Group maintained a representation.*

		DIGITAL TV	PUBLIC ACCESS	CYBERSECURITY	IOT
EUROPE	Germany	■	■	■	□
	Austria	□	■	□	□
	Belgium	□	■	□	□
	Spain	■	■	■	□
	France	■	■	■	■
	Ireland	□	■	□	□
	Italy	■	■	□	□
	Norway	■	■	□	□
	The Netherlands	■	■	■	□
	Portugal	■	■	□	□
	United Kingdom	■	■	■	□
	Russia	■	■	□	□
	Sweden	□	■	□	□
	Switzerland	■	■	■	■
	Turkey	□	■	□	□
AMERICAS	Argentina	■	□	□	□
	Brazil	■	■	□	□
	Chile	□	■	□	□
	Colombia	■	□	□	□
	Mexico	■	■	□	□
	Peru	■	□	□	□
	USA	■	■	■	■
AFRICA	South Africa	■	■	□	□
	Tunisia	□	■	□	□
MIDDLE EAST	United Arab Emirates	■	■	□	□
ASIA / PACIFIC	Australia	■	■	□	□
	China	■	■	□	□
	South Korea	■	□	□	□
	Hong Kong	□	■	□	□
	India	■	■	■	■
	Indonesia	■	□	□	□
	Japan	■	■	□	□
	Malaysia	□	■	□	□
	Singapore	■	□	□	□

1.2. Significant shareholders

As of December 31, 2021, Kudelski SA has two significant shareholders. The first one consists of a group of shareholders related to the Kudelski family ("Family Pool") with a total of 58.83% of the voting rights of Kudelski SA (see the table below). The Family Pool comprises Mr. André Kudelski, Mrs. Marguerite Kudelski, Mrs. Isabelle Kudelski Haldy, Mrs. Irène Kudelski Mauroux and their respective descendants. Members of the Family Pool own the shares of Kudelski SA directly or through an investment structure of which they are the beneficiaries.

The second significant shareholder ("Kudelski Family outside the Pool*") is composed of two discretionary and irrevocable trusts, whose beneficiaries are members of the family of Mr. André Kudelski. As of December 31, 2021, the Kudelski Family outside the Pool held a total of 4.12% of the voting rights of Kudelski S.A. (see below). In its capacity as a protector of these trusts, Mr Antoine Foetisch in Singapore, freely exercises the voting rights of the shares held by these trusts. To the Group's knowledge, no other shareholder or group of shareholders holds more than 3% of the voting rights. All announcements made by Kudelski SA to the SIX Exchange Regulation can be found on the SIX Swiss Exchange website at the following address: https://www.six-group.com/fr/products-services/the-swiss-stock-exchange/market-data/shares/share-explorer/share-details.html?valorId=CH0012268360CHF4#/ and then clicking on the "Significant shareholders" link.

1.3. Cross-shareholdings

The Group has no knowledge of the existence of any cross-shareholdings.

AS OF DECEMBER 31, 2021	REGISTERED SHARES	BEARER SHARES	SHARE CAPITAL HELD	VOTING RIGHTS
Family Pool	46 300 000	10 782 923	27.84%	58.83%
Kudelski Family outside the Pool*		4 000 000	7.22%	4.12%

** On June 27, 2017, the ad hoc publicity of the SIX Swiss Exchange has advised that the trustee beneficiaries are not required to report positions held by trusts.*

2. Capital structure

2.1. Amount of ordinary, authorized and conditional capital as at 31.12.2021

Ordinary capital

The share capital of Kudelski SA is CHF 442 412 000. It is divided into 50 671 500 bearer shares with a nominal value of CHF 8.00 per share and 46 300 000 registered shares with a nominal value of CHF 0.80 per share. Each share confers the right to one vote. All shares are fully paid up. Articles 6 and 7 of the articles of association of Kudelski SA, which can be found on the company's website at the following address: https://www.nagra.com/investors/publications, also contain an authorized capital clause and two conditional capital clauses (see section 2.2 below).

2.2. Specific information concerning authorized and conditional capital

Authorized capital

According to Article 7 of the articles of association of Kudelski SA, the Board of Directors is authorized to increase the share capital in one or more stages until April 15, 2022 by a maximum amount of CHF 32 705 312 (representing 7.39% of the existing share capital) through the issuance of 3 768 164 bearer shares with a nominal value of CHF 8.00 per share and 3 200 000 registered shares with a nominal value of CHF 0.80 per share to be fully paid up. The issuance price, the nature of the contributions, the date from which new shares shall give entitlement to dividends and other modalities of any share issuance shall be determined by the Board of Directors.The preferential subscription rights of shareholders may be excluded and allotted to third parties by the Board of Directors with a view to acquiring companies or parts of companies or in order to finance the whole or partial acquisition of other companies in Switzerland or abroad. The statutory restrictions on the transfer of shares apply to new registered shares issued on the basis of the authorized capital.

Conditional capital

The articles of association of Kudelski SA (Articles 6 and 6bis) provide two clauses related to conditional capital for a total amount of CHF 85 138 048 (19.24% of the existing share capital) structured as follows:

- according to Article 6 of the articles of association (conditional capital for option or subscription rights), the share capital of Kudelski SA can be increased by a maximum amount of CHF 5 138 048 (1.16% of the existing capital) through the issuance of a maximum of 642 256 bearer shares with a nominal value of CHF 8.00 per share, to be fully paid up, as and when the option rights or share subscription rights which will be granted to the employees of the company and of affiliated companies are exercised. There are no preferential subscription rights for shareholders. Share option or subscription conditions are determined by the Board of Directors. Issuance at a price below market conditions is authorized; and

- according to Article 6bis of the articles of association (conditional capital for conversion rights), the share capital of Kudelski SA can be increased by a maximum amount of CHF 80 000 000 (18.08% of the existing capital) through the issuance of a maximum of 10 000 000 bearer shares with a nominal value of CHF 8.00 per share, to be fully paid up, as and when the conversion rights related to the convertible bonds of the company or its subsidiaries are exercised.

There are no preferential subscription rights for shareholders. The preferential subscription right of shareholders to the issuance of a convertible bond may be limited or excluded by decision of the Board of Directors on valid grounds, namely (a) if the convertible bonds are placed primarily in markets outside Switzerland, or (b) if the issuance proceeds contribute (i) to the financing or refinancing of acquisitions of companies or firms, (ii) to the financing of other strategic investments of the Group, or (iii) to financing the redemption of all or part of convertible bonds previously issued by the company or its subsidiaries.

If the convertible bond is not offered preferentially to shareholders, (a) the convertible bonds must be sold to the public under market conditions, (b) conversion rights must be exercised within a period of seven years from the day of issuance of the respective bond, and (c) the conversion price must be at least equivalent to market conditions at the time of the issuance of the bond.

As of December 31, 2021, Kudelski SA had issued 65 472 bearer shares on the basis of conditional capital for option or subscription rights. These new bearer shares will be entered in the commercial register in the first three months of 2022, in accordance with Article 653h of the Code of Obligations. As of December 31, 2021, the available amount of contingent capital for option and subscription rights was therefore CHF 4 614 272, representing a maximum of 576 784 bearer shares with a par value of CHF 8.00 each.

As of December 31, 2021, Kudelski SA had not issued any option rights within the meaning of Article 6 of the articles of association and no conversion rights related to debt obligations within the meaning of Article 6bis of the articles of association. The conditional capital for option or subscription rights under Article 6 of the articles of association may, however, be used in the context of the employee share purchase plan (see section 2.7 below).

2.3. Changes in the capital of Kudelski SA

IN THOUSAND CHF	31.12.21	31.12.20	31.12.19
Registered share capital	37 040	37 040	37 040
Bearer share capital	405 896	402 981	400 922
Legal reserve	90 000	110 000	110 000
Capital contribution reserve	68 702	71 467	74 216
Net profit	11 004	-28 845	-63 413
Retained earnings	21 429	-6 810	24 785
TOTAL SHAREHOLDERS' EQUITY	**623 067**	**614 679**	**646 962**

For information relating to changes in capital which have taken place in 2021, 2020 and 2019, please refer to the Group's corresponding financial statements. These reports can be found on the Kudelski SA website at www.nagra.com/investors/publications. Information regarding the capital contribution reserve can be found under note 3.4 to the Kudelski SA financial statements in the Kudelski Group's 2021 financial statements.

2.4. Shares and participation certificates
The structure of the share capital of Kudelski SA is described in section 2.1 above.

In compliance with section 18 3rd paragraph of the articles of association, class A and B shareholders are represented on the Board of Directors.

Kudelski SA does not have participation certificates.

2.5. Dividend-right certificates
Kudelski SA does not have dividend-right certificates.

2.6. Limitations on transferability and nominee registrations
Shares of Kudelski SA that are listed on the stock exchange are issued to the bearer. For these shares, the exercise of shareholder rights does not depend on an entry in the share register. There are therefore no statutory restrictions on their transfer or the exercise of shareholder rights through nominees.

The registered shares of Kudelski SA are not listed on the stock exchange. As of December 31, 2021, they were all owned by the Kudelski "Family Pool" (see section 1.2 above). Pursuant to the articles of association of Kudelski SA, subject to the provisions of the Swiss Federal Act on Intermediated Securities, registered shares may be transferred upon delivery of the endorsed share certificate, subject to the approval of the Board of Directors and registration in the share register.

Article 9 of the articles of association of Kudelski SA allows the Board of Directors to refuse the approval of the transfer of registered shares in one or more of the following cases:

a) If there exists good cause within the meaning of Article 685b paragraph 2 of the Swiss Code of Obligations, i.e. if admission of the acquirer as a shareholder would be incompatible with the objective of Kudelski SA or could jeopardize the economic independence of the company. This would in particular be the case if the acquirer could prejudice the company directly or indirectly, or if transfer of the shares could jeopardize the existing majorities.

b) If the company offers the seller of the shares to acquire the shares at their fair value at the time of the request for its own account, for the account of other shareholders or for the account of third parties.

c) If the acquirer does not expressly declare that he is acquiring the shares in his own name and for his own account.

Article 9 of the articles of association also provides that if the shares are acquired by inheritance, division of an estate, marital property rights or as a result of debt enforcement proceedings, the company may only refuse its consent if it offers to acquire the shares at their fair value.

In the event of a dispute, the fair value is determined by the court having jurisdiction in the place where the company has its registered office. The company bears the costs of such valuation. The purchase offer is deemed accepted if the acquirer does not reject it within one month of having been informed of the fair value.

2.7. Convertible bonds and options

Convertible bond
The Kudelski Group has no outstanding convertible bond.

Options
The company has no outstanding options.

Share purchase plan
In 2004, the Kudelski Group introduced a share purchase plan for the employees of certain companies of the Group, enabling those employees to buy Kudelski SA bearer shares on favorable terms. Each participant can subscribe annually to this plan up to a maximum amount of 7.7% of his/her gross annual salary.

The share purchase price is the closing price of the Kudelski SA share listed on the SIX Swiss Exchange on the day of subscription with a discount of up to 42%. However, the shares are subject to a three-year blocking period from the date of purchase.

A chart showing employee participation in this plan for the year 2021 can be found in note 39 to the consolidated financial statements.

3. Board of Directors

The Board of Directors is the highest executive body of the company. It has the non-transferable and inalienable responsibilities set forth by the law and the articles of association. As of January 1, 2022, the Board of Directors consisted of eight members elected at the Annual General Meeting of Shareholders.

Three Committees, an Audit Committee, a Strategy Committee and a Nomination and Compensation Committee, have been created by the Board of Directors and are responsible for specific tasks (see sections 3.5.1to 3.6).

Mr. Mark Beariault, who is not a member of the Board of Directors, was appointed as Corporate Secretary by the Board of Directors.

3.1. Members of the Board of Directors

	YEAR OF BIRTH	NATIONALITY	EDUCATION	FIRST ELECTION	END OF TERM OF OFFICE
ANDRÉ KUDELSKI* Chairman of the Board and Chief Executive Officer Executive Board Member	1960	Swiss	**DEGREE IN PHYSICAL ENGINEERING** École polytechnique fédérale de Lausanne (EPFL), Switzerland	1987	21.04.2022
CLAUDE SMADJA Deputy Chairman of the Board and Lead Director Non-Executive Board Member	1945	Swiss	**DEGREE IN POLITICAL SCIENCE** University of Lausanne, Switzerland	1999	21.04.2022
PATRICK FOETISCH Non-Executive Board Member	1933	Swiss	**DOCTORATE IN LAW** University of Lausanne, Switzerland **BAR EXAM**	1992	21.04.2022
LAURENT DASSAULT Non-Executive Board Member	1953	French	**DEGREE IN BUSINESS LAW** **DEGREE FROM ESLSCA** École supérieure libre des sciences commerciales appliquées, Paris, France	1995	21.04.2022
PIERRE LESCURE Non-Executive Board Member	1945	French	**DEGREE IN LITERATURE AND JOURNALISM** Centre de formation des journalistes, Paris, France	2004	21.04.2022
MARGUERITE KUDELSKI Non-Executive Board Member	1965	Swiss	**ENGINEERING DEGREE IN MICROTECHNOLOGY** **DOCTORATE IN MICROTECHNOLOGY** École polytechnique fédérale de Lausanne (EPFL), Switzerland **EXECUTIVE MBA** IMD Lausanne, Switzerland	2006	21.04.2022
ALEC ROSS Non-Executive Board Member	1971	American	**DEGREE IN HISTORY** Northwestern University, USA	2014	21.04.2022
MICHAEL HENGARTNER Non-Executive Board Member	1966	Swiss and Canadian	**DOCTORATE IN BIOLOGY** Department of Biology, MIT, Cambridge, USA **EXECUTIVE MBA** IMD Lausanne, Switzerland	2020	21.04.2022

* *André Kudelski is the only member of the Board of Directors to combine his Board duties with an executive function within the Group (Chief Executive Officer). Apart from Mr. Kudelski, no other member of the Board of Directors performed any executive function within the Group during the past three years.*

ANDRÉ KUDELSKI

CLAUDE SMADJA

PATRICK FOETISCH

LAURENT DASSAULT

PIERRE LESCURE

MARGUERITE KUDELSKI

ALEC ROSS

MICHAEL HENGARTNER

ANDRÉ KUDELSKI

André Kudelski began his career in 1984 as a Research & Development (R&D) engineer with Kudelski SA. In 1986, after a short-term assignment in Silicon Valley, he returned to work in the family business firstly as Pay-TV Product Manager, then as Director of Nagravision SA, a company in charge of the Pay-TV sector. Mr. Kudelski then took over from his father Stefan Kudelski and from 1991 became Chairman and Chief Executive Officer of the parent company Kudelski SA.

Current mandates in the Kudelski Group:

- Kudelski Corporate, Inc., in USA, Chairman and Chief Executive Officer
- Kudelski Security, Inc., in USA, Executive Chairman and Chief Executive Officer
- Kudelski Security Holdings, Inc., in USA, Executive Chairman and Chief Executive Officer
- Nagravision Sàrl, in Switzerland, Board Member and Chief Executive Officer
- Nagra USA, LLC., in USA, Executive Chairman and Chief Executive Officer
- NagraStar LLC, in USA, Co-Chairman
- OpenTV, Inc., in USA, Executive Chairman and Chief Executive Officer
- SKIDATA GmbH, in Austria, Member of the Supervisory Board
- NAGRA PLUS SA, in Switzerland, Chairman and Chief Executive Officer (until December 20, 2021)
- SmarDTV SA, in Switzerland, Chairman (until January 31, 2019)
- Nagravision AS, in Norway, Chairman (until September 2018)

Important mandates outside the Kudelski Group:

- Comité d'economiesuisse, in Switzerland, member
- École polytechnique fédérale de Lausanne (EPFL), in Switzerland, Strategic Advisory Board member
- Fondation du Festival de Jazz de Montreux, in Switzerland, Chairman (Chairman since 2022)
- Foundation Bilderberg Meetings, in Netherlands, member of Steering Committee
- Foundation Swiss Digital Initiative, in Switzerland, member of the foundation board (since 2022)
- Greater Phoenix Economic Council (GPEC), in USA, member of the Executive Committeee
- Innosuisse, Swiss Innovation Agency, Chairman
- Publicis Groupe, in France, member of the Supervisory Board, Chairman of the Remuneration Committee, member of the Nomination Commitee and of the Audit Committee
- Swiss-American Chamber of Commerce, in Switzerland, Vice-Chairman
- Swiss Board Institute (Swiss foundation), member of the Strategic Advisory Board
- Aéroport International de Genève, in Switzerland, first Vice-Chairman (until November 30, 2018)

CLAUDE SMADJA

After fifteen years with Télévision Suisse Romande (TSR) as Deputy Editor of the Information Department, Claude Smadja joined the management of the World Economic Forum in 1987, a position that he held until 1992. He then returned to TSR as Director of Information until 1996, in which year he was appointed Managing Director of the World Economic Forum. In June 2001, Claude Smadja set up his own strategy consultancy Smadja & Smadja, a strategic advisory firm that collaborates on strategic issues with multinationals and government bodies and organizes international events.

Current mandate in the Kudelski Group:

- Nagravision Sàrl, in Switzerland, Board member

Main mandate outside the Kudelski Group:

- Smadja & Smadja Strategic Advisory SA, in Switzerland, Board member

Neither Mr. Smadja nor any organization he represents has any material business relationship with Kudelski SA or any of its subsidiaries.

PATRICK FOETISCH

Patrick Foetisch is an independent lawyer specializing in contracts and finance at an international level. He acts as legal counsel to Group companies as and when required, bringing to bear his in-depth knowledge of their activities to provide assistance and legal advice.

Current mandates in the Kudelski Group:

- Nagravision Sàrl, in Switzerland, Chairman
- Nagra France SAS, Chairman
- SKIDATA GmbH, in Austria, member of the Supervisory Board
- SmarDTV SAS, in France, Chairman
- NAGRA PLUS SA, in Switzerland, Board member (until December 20, 2021)

Main mandate outside the Kudelski Group:

- AMRP Handels, in Switzerland, Chairman

LAURENT DASSAULT

After a career spanning thirteen years in the banking sector, Laurent Dassault joined the Dassault Group in 1992 where he holds important positions. Today he assumes around thirty mandates, including those of the Dassault Group, mainly in the financial, industrial and wine-producing sectors.

Current mandate in the Kudelski Group:

- SKIDATA GmbH, in Austria, Chairman of the Supervisory Board

Current mandates in Groupe Industriel Marcel Dassault SAS (France)[1]:

- Arqana SAS, in France, advisor to the Directoire (Managing Board)
- Artcurial Développement Sàrl, in France, Co-manager (Co-gérant)
- DASSAULT BELGIQUE AVIATION S.A., in Belgium, Board member
- DASSAULT INVESTISSEMENTS Sàrl, in France, Managing Director
- Financière Louis Potel & Chabot SAS, in France, Board member
- Immobilière Dassault SA, in France, Chairman of the Supervisory Board
- Groupe Industriel Marcel Dassault SAS, in France, Supervisory Board member
- Les Amis de la fondation Serge Dassault, in France, Chairman
- Rond-Point Immobilier, in France, Supervisory Board member
- MIDWAY AIRCRAFT CORPORATION, in USA, Chairman
- SITAM America Corp., USA, Board member

Other important mandates outside the Kudelski Group:

- Vivendi SE (European Company, listed at Euronext Paris), in France, member of the Supervisory Board and member of the audit committee
- 21 Centrale Partners SA, in France, member of the Supervisory Board
- Catalyst Investments II L.P., in Israel, Chairman of the Advisory Board
- FLCP et Associés SASU, in France, member of the Supervisory Board
- LA MAISON SA, in Luxemburg, member of the Supervisory Board
- Laurent Dassault Rond Point (LDRP) SCI, in France, Associé gérant
- Laurent Dassault Rond Point II (LDRP II) SAS, in France, Chairman
- Lepercq, de Neuflize & Co. Inc., in United States, Board member
- L. REAL ESTATE SCA SICAR, in Luxemburg, Chairman of the Investors Committee
- SAGARD PRIVATE EQUITY PARTNERS SAS, in France, member of the Advisory Committee
- WARWYCK Private Bank Ltd, in Mauritius, Board member
- Amis du FRAC (Fonds Régional d'Art Contemporain en Aquitaine), in France, Chairman
- Amis du Centre Pompidou Association, in France, Board member
- Association pour la Diffusion Internationale de l'Art Français (ADIAF), Board member
- Association pour la Mémoire des Enfants cachés et des Justes (AMECJ), Board member and Treasurer
- Comité des Champs-Elysées, association, in France, Board member
- Fonds pour Paris, association, in France, Board member
- Fondation Maeght, in France, Board member
- Société des Amis des musées d'Orsay et de l'Orangerie, in France, Board member

Neither Mr. Dassault nor any organization he represents has any significant business relationship with Kudelski SA or any of its subsidiaries.

PIERRE LESCURE

Save for a two year period (1972-1974) as a television news presenter for Antenne 2, Pierre Lescure spent the first fifteen years of his professional career with the RTL, RMC and Europe 1 radio stations where he successively occupied a variety of positions, in particular Deputy Editor and Director of Programs. In 1981 he returned to television as News Director of Antenne 2. From 1984, he worked with André Rousselet on the launch project for the Pay-TV channel CANAL+ where he was appointed Director and then Chief Executive Officer. From 1993 to 2002, he was Chairman and Chief Executive Officer of the CANAL+ Group. From 2000 to 2002, Pierre Lescure was also co-Chief Executive Officer of Vivendi-Universal. Since 2002, he has been Chairman and Chief Executive Officer of AnnaRose Production SAS, a company active in audio-visual and cinematographic production as well as in communication consultancy services. From 2008 to 2014, he directed the Théâtre Marigny in Paris. Since July 1, 2014, Pierre Lescure has served as President of the Cannes Festival. Since September 2014, Pierre Lescure has been a regular TV columnist for the daily show "C à vous" which is broadcast on France 5, the French TV channel.

Current mandates with the Festival de Cannes[1]:

- Association française du festival international du film (known as "Le Festival de Cannes"), in France, Chairman
- Société de gestion d'opérations commerciales pour le festival international du film SASU, in France, Chairman

Current Mandates exercised for the Festival de Cannes:

- Fonds de dotation du festival international du film, in France, Chairman

Other important mandates outside the Kudelski Group:

- ANNAROSE PRODUCTIONS Sàrl, in France, Chairman and CEO
- Molotov SAS, in France, Board member
- Mediawan SAS, in France, Vice-Chairman of the Advisory Board

Mr. Lescure has never been part of a management body of the Kudelski Group. Neither he nor any organization he represents has any significant business relationship with Kudelski SA or any of its subsidiaries.

[1] *As per section 18 of the articles of association and as described below in section 3.3, mandates for legal entities under common control are deemed to constitute a single mandate.*

MARGUERITE KUDELSKI

Marguerite Kudelski's professional career began at the EPFL's Laboratory of Electromechanics and Electrical Machines, where she worked from 1991 to 1999. During this period she also worked as a research and development engineer within the Nagra Audio division of the Kudelski Group. In 1999, she became the Head of R&D with Précel SA in Neuchâtel (then a Kudelski Group company) before being appointed as CEO and Board member of the same company in 2000, positions that she occupied until the end of 2002. After completing a number of marketing and financial analysis projects for NagraID in 2003, she took responsibility for certain key projects for the Group within the Finance Department from 2004 to 2006. From 2007 to 2011, Marguerite Kudelski worked as a consultant, offering services such as business development and management consulting.

In December 2011, she took over the management of Nagra Audio, which was transferred by the Group to Audio Technology Switzerland SA (ATS) for which she serves as Chairman of the Board of Directors. Until the end of 2014, Marguerite Kudelski was in charge of the R&D department of ATS. Since 2017, Marguerite Kudelski is a Board member of Bovay & Partenaires SA and Wire Art Switzerland SA. She is also a member of the Expert Committee of Switzerland Innovation.

Main mandates outside the Kudelski Group:

- AudioTechnology Switzerland SA, in Switzerland, Chairman
- Bovay & Partenaires SA, in Switzerland, Board member
- Wire Art Switzerland SA, in Switzerland, Board member
- Switzerland Innovation, Foundation, in Switzerland, member of the Expert Committee
- Association Mobsya, in Switzerland, Board member

Apart from the mandates and functions mentioned above, neither Mrs. Kudelski nor any organization she represents has any significant business relationship with Kudelski SA or any of its subsidiaries.

ALEC ROSS

Alec Ross began his professional career in 1994 as a teacher with the Teach for America program in underprivileged neighborhoods of Baltimore. He joined Enterprise Community Partners (formerly Enterprise Foundation) two years later, a non-profit organization based in Columbia, Maryland, which develops affordable housing throughout the USA, where he held the position of Special Assistant to the Chairman. In 2000, Alec Ross co-founded the One Economy Corporation, a non-profit organization that organizes programs to help low-income people worldwide, for which he worked for eight years. In parallel, he joined the presidential campaign of President Barack Obama in 2007 as the Coordinator of the Technology, Media & Telecommunications Policy Committee and then as Project Manager and member of the Technology, Innovation and Government Reform Policy Group. From April 2009 to March 2013, Alec Ross was Senior Advisor for innovation to US Secretary of State Hillary Clinton. Since then, he has been Senior Fellow at the School of International and Public Affairs of Columbia University and a Distinguished Senior Fellow at John Hopkins University, and he is the author of the New York Times bestseller "The Industries of the Future" (Simon & Schuster) published in February 2016. He also advises investors, enterprises and government officials, helping them to understand the influence of factors located at the crossroads of geopolitics, markets and disruptive technologies. He is a Board Partner at Amplo, a global venture capital fund and since September 2020, Alec Ross is a Distinguished Visiting Professor at Bologna Business School of l'Universitá di Bologna, in Italy. He is most recently the author of the book "The Raging 2020s" (Henry Holt) published in September 2021.

Main mandates outside the Kudelski Group:

- Amida Technology Solutions Inc., in USA, Advisory Board member
- Amplo, in USA, Board partner
- Jobbatical Inc., in Estonia, Supervisory Board member
- Legalpad Inc., in USA, Supervisory Board member
- Pelliconi, in Italy, Supervisory Board Member
- Telerivet Inc., in USA, Board member
- Baltimore Community Foundation, in USA, Board of Directors
- Bologna Business School Foundation, in Italy, Board of Directors
- Truman Center for National Policy, in USA, Board of Advisors

Mr. Ross has never been part of a management body of the Kudelski Group. Neither he nor any organization he represents has any significant business relationship with Kudelski SA or any of its subsidiaries.

MICHAEL HENGARTNER

Michael Hengartner obtained a Ph.D. in Biology in 1994 from the Massachusetts Institute of Technology (MIT) in USA, where he studied with Nobel laureate H. Robert Horvitz. Following his Ph.D. and for seven years he led a research group at the Cold Spring Harbor Laboratory in the USA. In 2001, he became the first occupant of the Ernst Hadorn Endowed Chair for molecular biology at the Institute of Molecular Life Sciences at the University of Zurich (UZH). From 2009 to 2014, he was dean of the Faculty of Science, and from 2014 to 2020 president of UZH. From 2016 to 2020, he also served as president of Swiss universities, the Rectors' Conference of Swiss Higher Education Institutions. From 2020, Mr. Hengartner has served as President of the ETH Board (Swiss Federal Institutes of Technology) and Chairman of the Executive Committee of the ETH Domain. Mr. Hengartner holds an Executive MBA from IMD, Lausanne obtained in 2008 and is the recipient of several awards for his research on the molecular basis of apoptosis, among them the Swiss National Latsis Prize, Josef Steiner Cancer Research Award, and an honorary doctorate from the Sorbonne University. In 2010, Mr. Hengartner received the Credit Suisse Award for Best Teaching at UZH. He founded and/or was a member of the board of directors of a number of start-up companies, including the biotech company Devgen NV, in Belgium (co-founded in 1997) and the scientific consultancy company EvalueSCIENCE SA, in Switzerland (co-founded in 2008).

Main mandates outside the Kudelski Group:

- Novalis Biotech Incubation Fund, in Belgium, Scientific Advisor and Advisory Board member
- Swiss National Science Foundation, in Switzerland, member of the Foundation Board
- Switzerland Innovation, Foundation, in Switzerland, member of the Foundation Board
- Cogito Foundation, in Switzerland, member of the Foundation Board
- Ernst Hadorn Foundation, in Switzerland, member of the Foundation Board
- World.Minds Foundation, in Switzerland, member of the Foundation Board
- Swiss Study Foundation (Schweizerische Studienstiftung), in Switzerland, Chair of the Education Board and Vice-president of the Foundation Board
- digitalswitzerland, association, in Switzerland, member of the Steering Board
- IMD- International Institute for Management Development, Lausanne, in Switzerland, member of the Foundation Board
- Europa Institut at the University of Zurich, association, in Switzerland, member of the Board
- Ludwig-Maximilians-Universität München, in Germany, Member of the University Council
- University of Heidelberg, in Germany, member of the Academic Advisory Council
- Stiftschule Einsiedeln, in Switzerland, member of the Advisory Board
- Swiss Institute of International Studies, association, in Switzerland, member of the Board of Trustees
- Verein Forschung für Leben, in Switzerland, honorary member
- International Cell Death Society, in USA, member of the Advisory Board
- Quartierverein Oberstrass, in Switzerland, member of the Steering Committee
- Stiftung Avenir Suisse, in Switzerland, member of the Foundation Board
- Swiss Science Center Technorama, in Switzerland, member of the Foundation Board

Mr. Hengartner has never been part of a management body of the Kudelski Group. Neither he nor any organization he represents has any significant business relationship with Kudelski SA or any of its subsidiaries.

3.2. Other activities and vested interests

Please refer to the individual profiles of Board members under section 3.1 above.

3.3. Articles of association provisions on the number of permitted activities

In compliance with section 18 of the articles of association, members of the Board of Directors may exercise no more than five mandates in senior management or administrative bodies of third-party legal entities whose shares are listed on a stock exchange and no more than ten mandates in other third-party legal entities. They may also exercise up to ten mandates in senior management or administrative bodies of non-profit or charitable third-party legal entities.

A company is not considered a third-party legal entity according to this provision, and is therefore not taken into account when calculating the maximum number of mandates mentioned above, if:

1. it controls another company directly, indirectly or jointly with third parties for which a mandate is being carried out, or is controlled by such company; or
2. it does not have to be entered in the Commercial Register or in a corresponding foreign register (e.g. corporations and public entities, non-profit associations, religious foundations or family foundations); or
3. the mandate is carried out at the company's request.

Mandates carried out for legal entities directly or indirectly controlled by a single individual or legal entity, or by a single group of individuals or legal entities acting in concert, or at the request of one of these individuals or legal entities, are deemed to constitute a single mandate for the purposes of this provision.

Members of the Board of Directors must notify the Chairman of positions they hold at third-party legal entities.

3.4. Election and terms of office

The Board of Directors is composed of one to ten members. Board members are individually elected at the Annual General Meeting for a period of one year. The term of office ends on the day of the next Annual General Meeting. All members may be reelected. The year of the first election as well as the end of term of office for each member are mentioned under section 3.1 above.

The articles of association of Kudelski SA do not contain any special provisions regarding the election of the Chairman.

3.5. Internal organization structure

The Board of Directors performs inalienable and nontransferable duties prescribed by the law (see section 3.6 below) with the support of its three committees: Audit, Strategy, and Nomination and Compensation. The internal organization of the Board of Directors is defined in the articles of association and in the bylaws. The bylaws are available on request to the Corporate Secretary of the Kudelski Group by calling +41 21 732 07 31 or by post at the following address: Route de Genève 22-24, 1033 Cheseaux-sur-Lausanne.

3.5.1. Allocation of tasks within the Board of Directors

Except for the Chairman who is elected at the Annual General Meeting, the Board of Directors establishes itself by appointing its Vice Chairman. The Board of Directors may delegate the management of the company to one of its members who shall act as Chief Executive Officer of the company. If the Chairman is elected to exercise the function of Chief Executive Officer, the Board of Directors shall also elect a "Lead Director" from among its members. The management of the company is delegated in full to the Chief Executive Officer or to the Executive Board. A Corporate Secretary may be appointed from outside of the Board of Directors.

The Chairman of the Board of Directors leads the discussions of the Annual General Meeting, ensures that the minutes are taken, is in charge of the protocol and directs meetings of the Board, informs the Board members of the business development and the company's financial results, represents the company with administrative and/or judicial authorities, subject to mandates granted by the Board of Directors to a third party, an officer or one of its members.

The Vice Chairman may call meetings of the Board of Directors. He or she shall chair Board meetings and the Annual General Meeting if the Chairman is absent.

According to Article 25 of Kudelski SA's articles of association, the Board of Directors may delegate the management of the company to the Chief Executive Officer, unless otherwise stipulated by the law. In his or her management, the Chief Executive Officer acts according to the directives issued by the Board of Directors and in the interests of the company. He or she also provides before each meeting of the Board of Directors a report outlining key aspects of the current business situation.

In the Group's current structure, Mr. André Kudelski holds the positions of Chairman of the Board of Directors and Chief Executive Officer. This situation guarantees a rapid and fluid information and decision-making process, enabling the company to respond operationally and strategically at the pace required by developments in the sectors of activity pursued by the Group. As the functions of Chairman and Chief Executive Officer are held by the same person, the Board of Directors has appointed Mr. Claude Smadja as Lead Director.

The Lead Director ensures the independence of the Board of Directors vis-à-vis the Chairman and Chief Executive Officer as well as the management of the company; he or she also chairs the Board of Directors' meetings if a conflict arises between the interests of the Chairman and Chief Executive Officer and those of the company. The Lead Director may independently call and lead a meeting of the independent members of the Board of Directors if the interest of the company requires an independent deliberation. He or she ensures a process for evaluating the performance of the Chairman of the Board of Directors and the Chief Executive Officer.

3.5.2. Members list, tasks and area of responsibility for each committee of the Board of Directors

With the exception of the Nomination and Compensation Committee, whose members are elected individually by the Annual General Meeting, the Committees are constituted by the Board of Directors which appoints their members and chairpersons. The Board Committees meet as often as is necessary. The Board of Directors delegates to its committees supervisory and preparatory tasks within their sphere of competence, subject to the provisions of the articles of association. The Committees report on a regular basis to the Board of Directors. Committee reports are used as a decision-making tool by the Board of Directors.

Audit Committee

The Audit Committee is composed of at least three non-executive members of the Board of Directors. At least one of the Committee members must have proven accounting experience. All members have knowledge or practical experience in the field of financial management.

The Audit Committee meets at least three times a year. The Audit Committee may at any time request detailed risk analyses of the Group's various sectors of activity or in any specific area of its choice.

The Committee calls on experts outside the Board of Directors where this is deemed necessary for the successful completion of its tasks.

	AUDIT COMMITTEE	STRATEGY COMMITTEE	NOMINATION AND COMPENSATION COMMITTEE
André Kudelski		Member	
Claude Smadja	President	Member	Member
Laurent Dassault		Member	
Patrick Foetisch			President
Marguerite Kudelski	Member		
Pierre Lescure		President	Member
Alec Ross	Member	Member	Member
Michael Hengartner			

The Audit Committee supervises the company's internal financial reporting process and ensures its integrity, transparency and quality. It ensures the relevance and consistency of the company's accounting methods. It reviews reports of the company's internal audit department and makes appropriate recommendations to the Board of Directors.

It assesses the quality of work of external auditors. The Audit Committee reviews the auditing fees, ensures execution of the yearly audit plan and assesses the efficiency of the auditors in identifying and solving issues related to the Group or to the financial statements. The Audit Committee provides appropriate recommendations to the Board of Directors concerning renewal of the engagement of external auditors or, where necessary, their replacement. The Committee ensures that the recommendations of external auditors are monitored and ensures their independence.

The Committee provides regular reports offering its recommendations to the Board of Directors with regards to the adequacy, effectiveness and accuracy of accounting procedures.

Strategy Committee

The Strategy Committee is composed of at least four members of the Board of Directors, including the Chairman and Vice Chairman. It meets at least twice a year.

The purpose of the Strategy Committee is to review and define Group strategy. It develops strategic options with a view to ensuring the long-term enhancement of the Group's competitive position and its shareholder value. To this end, the Strategy Committee examines market trends and the Group's competitive position, considers and proposes future growth initiatives, especially through investments, divestments and reorganization.

To define strategic choices, the Strategy Committee relies upon information supplied by the management, the members of the Board of Directors and, if deemed necessary, by external advisors.

The Strategy Committee periodically reviews the appropriateness of the Group's objectives, structure and organization designed to achieve the strategic objectives. The Strategy Committee makes proposals to the Board of Directors, which has ultimate decision-making power on strategy. It reviews also research and development projects and evaluates the competitiveness, value and coherence of such projects in relation to the strategic objectives.

Nomination and Compensation Committee

The Nomination and Compensation Committee is composed of at least three non-executive members of the Board of Directors, who are elected individually at the Annual General Meeting upon recommendation of the Board of Directors. It meets at least twice a year.

The Nomination and Compensation Committee assists the Board of Directors in setting up and periodically reviewing the company's compensation policy and strategy, its guidelines and its performance criteria. The Committee is responsible for setting the compensation for each member of the Board of Directors and the Executive Board. The exception to this principle is the compensation of the members of the Nomination and Compensation Committee, which is fixed by the Board of Directors itself.

The Nomination and Compensation Committee also assists the Board of Directors in making proposals at the Annual General Meeting regarding the compensation of the members of the Board of Directors and of the Executive Board (refer to section 5: Compensation, shareholdings and loans). The Committee presents proposed director nominations to the Board of Directors, which submits them to the Annual General Meeting. At the request of the Chief Executive Officer, the Committee reviews applicants for Executive Board positions or promotions and may interview candidates if desired.

3.5.3. Working methods of the Board of Directors and its Committees

The cooperation and allocation of competencies between the Board of Directors and its Committees are described in section 3.5.2.

The Board of Directors meets at least four times a year, but as often as is required for the proper conduct of business. In 2021, the Board of Directors and its Committees met as follows:

Board of Directors	8 times
Strategy Committee	4 times
Audit Committee	3 times
Compensation and Nomination Committee	2 times

In addition, in 2021, a special committee of the Board, consisting of Messrs. Smadja (who served as its chairman), Hengartner and Ross, was created to review and provide an advisory recommendation to the Board concerning the sale and lease-back transaction involving the properties hosting the Group's headquarters in Cheseaux, Switzerland as announced on December 23, 2021 (https://www.nagra.com/media-center/press-releases/kudelski-group-enters-sale-and-leaseback-transaction-its-cheseaux).

The participation of members of the Executive Board to the discussion and decisions of the Board of Directors are described in section 3.7 below. Average attendance at Board meetings was 93.3%. Meetings of the Board of Directors lasted on average four hours. Most Committee meetings lasted on average three hours. Both the external auditors of the company from PricewaterhouseCoopers SA and the company's internal auditor attended the portions of the Audit Committee meetings that were relevant to them.

3.6. Definition of areas of responsibility

Please see also section 3.5.1 for details of the internal organization of the Board of Directors and the position of Chief Executive Officer.

Board of Directors

The Board of Directors:

- is responsible for the overall management of the company and issues all necessary directives;
- determines the organization of the company;
- determines the organization of the accounting, financial control and financial planning systems as required for management of the company;
- appoints and dismisses persons entrusted with managing and representing the company;
- exercises overall supervision of the persons entrusted with managing the company, in particular with respect to compliance with the law, articles of association, regulations and directions given;
- prepares the Compensation report;
- compiles the annual report, prepares the Annual General Meeting and implements its resolutions;
- takes decisions on further capital calls with respect to shares that are not fully paid up (Article 634a of the Code of Obligations);
- takes decisions regarding the assessment of an increase in capital and relevant changes to the articles of association (Articles 651 para. 4, 651a, 652a, 652g, 652h, 653g, 653h of the Code of Obligations); and
- notifies the court in the event that the company is overindebted.

Executive Board

The Board of Directors has delegated full management of the company to the Chief Executive Officer, subject to legal requirements and the above-mentioned internal organizational structure. The Chief Executive Officer therefore coordinates the operations of the Group companies.

3.7. Information and control instruments vis-à-vis the Executive Board

Because of the nature of the industry, mechanisms for controlling Group management and information feedback systems are very important. The Kudelski Group has therefore put in place information and control instruments, at different levels, which it improves on a continuous basis. These instruments concern strategy, operations, finance, legal, intellectual property, human resources and information management.

Supervision

- The Chief Executive Officer submits a report to the Board members prior to each meeting highlighting key aspects of the current business situation (e.g. key contracts, sales trends, market trends and human resources matters) for each Group entity and activity.

- Board members receive weekly or quarterly press digests concerning the Group, depending on the amount of relevant news flow; they may also receive other informative documents concerning the Group and its entities, as well as a message from the Chief Executive Officer whenever the CEO deems it necessary.

- At least once a year, members of the Executive Board are invited to present their activities to the members of the Board of Directors. Members of the Board of Directors may also ask questions directly to company executives as and when they see fit.

- At each Board meeting, if justified by the business situation and depending on the agenda, members of the Executive Board, top managers of the companies of the Group or in charge of specific areas, as well as outside experts, are invited to present specific subjects to the Board of Directors.

Operations and strategy

- Executive Board members coordinate their actions and take decisions related to the management of the Group during "Executive Board Committee" meetings, the frequency and duration of which are tailored to the needs of the Group. Other senior members of management are invited to attend such meetings as may be necessary to provide input on topics discussed. This committee generally met once every two weeks for an average of three hours in 2021.

- Management of the Digital TV, Cybersecurity and IoT divisions is supported by an "Executive Board Group Operations" committee composed of the Chief Executive Officer (CEO), the Chief Financial Officer (CFO), the Chief Marketing Officer (CMO), the Chief Operating Officer (COO), as well as senior members of each division. This committee meets in principle twice a month for 2.5 hours and reviews in particular selected relevant topics for each division. In addition, the Chief Executive Officer (CEO), the Chief Financial Officer (CFO), the General Counsel, Head of Legal Affairs and Corporate Secretary, the Senior Vice President, Head of Human Resources and the Senior Vice President, Chief Information Officer meet once a month for at least one hour as part of the "Executive Board Group Functions" committee to discuss selected relevant topics relating to these functions. Other senior members of management are invited to attend such meetings as may be necessary to provide input on topics discussed. Finally, synchronization between the Executive Board and the "Executive Board Group Operations" and the "Executive Board Group Functions" committees is achieved within the "Executive Board Group Management" committee which meets every month for at least one hour.

- Management of the Public Access division is supported by a Supervisory Board, which includes one or more members of the Board of Kudelski SA, the Chairman and CEO of the Kudelski Group and the CFO of the Kudelski Group. Currently, Mr. Laurent Dassault is Chairman of the Supervisory Board. The Supervisory Board supervises the whole division. The Supervisory Board meets at least four times a year for an average of 3.5 hours and reviews the specific and pertinent topics for the Public Access division. Senior Managers of the Public Access division establish regular reports for the Supervisory Board and, depending on the topics, are invited to take part in Board meetings.

- Strategy of the Group is discussed among the members of the Executive Board and the senior members of management of the Group, including senior managers from the business units and corporate support functions, who meet on a quarterly basis to review key trends, product and market developments and other relevant matters relating to the strategy of the Group and its business lines.

- For certain specialized activities of the Group, ad hoc committees composed of a cross-disciplinary team of internal experts may be created to evaluate market, strategic, operational, legal and financial risks and opportunities. These ad hoc committees manage processes relating to the evaluation of such risks and opportunities, propose actions and monitor implementation of their decisions. There are several committees such as the security committee, privacy committee, intellectual property and innovation committee. Decisions, activities, information and comments arising from these committees are conveyed to the Executive Board members and other top managers of the Group as appropriate.

Finance

- The Controlling group conducts regular financial and operational analyses intended to identify operational and financial risks throughout the value chain of the various activities of Group companies and proposes and coordinates necessary improvements and corrective actions. This group makes available a platform of analytical data and analysis tools to the Executive Board and departments within the company.

- Every month, the Controlling group prepares a number of reports that are made available to the management. Those reports are then adapted and made available to each regional head and business unit with the corresponding analytical metrics. The reports include: a report providing an overview of the Group's profit and loss broken down by activity and showing profit trends and budget over-runs/shortfalls, with adaptations based on quarterly revisions of the annual forecast by entity, as well as their operational indicators; a sales report including region, client and sales type-specific analysis as well as their respective margins; a report on the operational cost trends broken down by cost center, and a monthly and quarterly report on the cash-flow situation and projections for the Group and for each segment for the current year and the coming year.

- In addition, the Group has an internal control system based on the COSO (Committee of Sponsoring Organizations of the Treadway Commission) reference system. This system aims at providing "reasonable assurance" as regards the performance and efficiency of operations, the reliability of financial information and reporting, and compliance with laws and regulations in force. A team is in charge of internal controls. The various processes are periodically reviewed and analyzed by the external auditors (PricewaterhouseCoopers SA).

Legal

- The Legal department provides advice and consultation as part of the Group's decision-making processes and as part of the activities of all Group departments in order to better mitigate and manage legal risks as well as to ensure appropriate levels of compliance with the Group's policies.

- The Legal department is involved with the negotiation and approval of contracts entered into by Group companies and maintains contract management and electronic archiving tools to ensure efficient tracking of contracts.

- The Legal department is responsible for overseeing litigation, government investigations and other regulatory matters for Group companies and supports the company's privacy committee, which is responsible for ensuring compliance with the various data privacy laws and regulations in the countries in which the company operates.

- The Legal department includes the intellectual property team that is responsible for protecting, developing and managing the Group's intellectual property portfolio. In addition, the Legal department works in close collaboration with the Business Development and Innovation department to monetize the Group's intellectual property portfolio.

Business Development and Innovation

- The Business Development and Innovation department, in close collaboration with the intellectual property team of the Legal department, works to monetize the Group's intellectual property portfolio.

- The Business Development and Innovation department identifies and spearheads multiple business development initiatives to expand beyond the Group's current product and services portfolio. The department also manages the launch of these new products and services, such as Sporfie and Insight, into new markets.

- The Business Development and Innovation department manages a company-wide innovation process and maintains a positive innovation momentum in the organization to further boost motivation and institutionalize the innovation process.

- The Business Development and Innovation department is responsible for managing strategic transactions involving the companies of the Group, including mergers and acquisitions (M&A), joint ventures, equity investments and divestments as well as key partnerships in support of the Group's business strategy.

Human Resources

- The Human Resources department is responsible for recruiting and hiring the talent necessary for the Group to achieve its business objectives, developing and promoting high-performing employees and ensuring succession planning. The department manages training programs and supports other educational opportunities for employees that are tailored to the needs of the Group.

- The Human Resources department oversees the processes designed to assist managers with the evaluation of employee performance against objectives of the Group and individual employee objectives. In addition, the department has implemented an employee engagement survey platform that provides management with regular employee feedback concerning relevant topics.

- In respect of the Group's values, the Human Resources department advises employees and managers from all Group departments on a daily basis in employment-related matters.

Information Management

- The Corporate IT department has developed and implemented a series of policies and procedures concerning IT security (for the use of computer systems, data protection, monitoring, systems management back-up, etc.) to set appropriate risk limits and to provide a reliable Information System environment.

- The Corporate IT department regularly reviews the infrastructure of its systems to ensure their evolution in accordance with the new standards and rules that apply to them.

- The information systems infrastructure is monitored 24/7 by the teams of the Cyber Fusion Center of Kudelski Security.

Main identified risks and treatment

- The main identified risks are listed below. The various information and control instruments of the Board of Directors with respect to the Executive Board described above in section 3.7 are used and allow monitoring of each risk appropriately and according to its criticality for the Group. The communications of the Chairman and Chief Executive Officer to the Board of Directors ensure regular and appropriate information flow and the activities of the committees of the Board of Directors guarantee appropriate supervision by the members of the Board of Directors of the decisions of the Executive Board.

- The business segments in which the Kudelski Group's Digital TV division operate are evolving rapidly and constantly require the Kudelski Group to offer products and services that are flexible enough to respond quickly to the commercial and technological changes of the digital media industry.

- The Public Access business demonstrates significant seasonality, including for example within its mountain segment, with the highest revenues typically generated in the last two months of the year. Many of the factors that impact the timing of the segment's revenue generation are outside the control of the Group, including factors such as the impacts of the ongoing pandemic, weather conditions, changes to project scope and customer budget decisions. To the extent these factors impact the timing of customer orders and projects, particularly in the last quarter of the year, the results of operations of the Public Access business for the year can be materially impacted.

- The two newest divisions (Cybersecurity and Internet of Things) are still in varying degrees of development and as such both fields of activities generate substantial losses. The Group has identified attractive opportunities in these markets. However, while the Group believes it has unique assets to profitably address these fields of activities, it will take an extended period of time for these activities to reach break-even. Given the nature and degree of maturity of these activities, there is no assurance that the relevant strategies will be successful.

- The markets in which the Group operates and the customers to whom the Group sells its products and services are subject to significant regulation by governmental agencies around the world, particularly in the areas of data privacy, consumer protection, media content distribution and cybersecurity. Significant changes to or uncertainty regarding government regulations may affect our business, our product development decisions and the willingness of market participants to adopt our products and services. In addition, political instability and war affecting the markets in which the Group operates may disrupt the Group's business operations, supply chain and customer demand.

- The Group provides its products and services in many countries with different currencies, but payments are made mainly in US dollars and Euros. The Group's suppliers are paid in different currencies. Fluctuations in foreign exchange rates may affect the Group's results of operations and financial position.

- Kudelski Group's results could be impacted if the security provided by its products is compromised and if the Group fails to put in place adequate countermeasures.

- The operating results and growth of the Kudelski Group could decrease if the customer base of the Group's customers does not continue to increase.

- As of December 31, 2021, the Group has outstanding short-term financial debt of USD 240.0 million, including an outstanding CHF 184.6 million bond maturing in 2022, and long-term financial debt of USD 196.9 million including an outstanding CHF 147.7 million bond maturing in 2024. The Group may not generate enough cash to repay such debt and may not be able to raise sufficient funds to refinance such debt.

- The Group's success depends on its ability to attract and retain qualified personnel. Competition for hiring and retaining highly qualified personnel is high.

- A leak of confidential, proprietary or personal information held by the Group could adversely affect the Group's activities.

- The global outbreak of novel coronavirus (COVID-19) and the containment measures taken in response thereto, including quarantines, lockdowns, office closures and travel restrictions, have materially impacted the Group's operations, sales and operating results in 2020 and 2021. The future impact of the outbreak on the global economy and the Group's operations is highly uncertain and cannot be predicted. To the extent the pandemic continues and/or its severity worsens, the Group could suffer increased costs, delays in fulfilling customer delivery obligations and decreased revenues, any of which could materially impact the future financial results of the Group.

4. Executive Board
4.1. Executive Board members

	DATE OF BIRTH	NATIONALITY	POSITION	EDUCATION
ANDRÉ KUDELSKI	1960	Swiss	**CHAIRMAN AND CHIEF EXECUTIVE OFFICER (CEO) OF THE GROUP**	**Degree in Physical Engineering** École polytechnique fédérale de Lausanne (EPFL), Switzerland
MAURO SALADINI Executive Vice President of the Group	1966	Swiss	**CHIEF FINANCIAL OFFICER (CFO)**	**Degree in Electrical Engineering** Swiss Federal Institute of Technology, Zurich (ETH Zurich), Switzerland **MBA,** INSEAD, France
MORTEN SOLBAKKEN Executive Vice President of the Group	1970	Norwegian	**CHIEF OPERATING OFFICER (COO), DIGITAL TV**	**Master of Science** Norwegian University of Science and Technology (NTNU)
NANCY GOLDBERG Executive Vice President of the Group	1964	American	**CHIEF MARKETING OFFICER (CMO), DIGITAL TV**	**High School Diploma** Glendora, CA, USA

ANDRÉ KUDELSKI (CEO)

Please refer to section 3.1 above

MAURO SALADINI (CFO)

Mauro Saladini started his professional career in 1990 as a financial services consultant with Accenture. In 1995, he joined Thema Consulting, where he set up the Zurich subsidiary and took responsibility for cash-flow and risk management activities. In 1997, he joined McKinsey & Co, where he became a partner in 2001. He worked in particular on corporate finance and strategy projects relating to various industries, mainly media and telecommunications. In addition, Mauro Saladini was in charge of the Swiss Media Practice and was joint-head of the European Media Practice. He has been the Chief Financial Officer and Executive Vice President of the Kudelski Group since February 1, 2003.

Current mandates in the Kudelski Group:

- Nagravision in Norway, Board member and General Manager
- Kudelski Corporate, Inc., in USA, Board member and CFO
- Kudelski Norway AS, Board of Directors, Chairman and General Manager
- Kudelski Security Inc., in USA, Board member and Executive Vice-President
- Kudelski Security Holdings Inc., in USA, Board member and Executive Vice-President
- Nagra Media Beijing Ltd., in China, Supervisor
- Nagra Media Germany GmbH, in Germany, Managing Director
- Nagra Media UK Limited, in United Kingdom, Director
- Nagra USA, LLC., in USA, Executive Vice-President
- OpenTV, Inc., in USA, Board member and Executive Vice-President
- SKIDATA GmbH, in Austria, Vice-Chairman of the Supervisory Board
- SKIDATA, INC, in USA, Director
- Nagra IP, Inc., in USA, Board member (until March 28, 2019)
- Kudelski Corporate Holding, Inc., in USA, Board member (until February 19, 2019)
- iWedia SA, in Switzerland, Chairman of the Board (until July 18, 2019)

MORTEN SOLBAKKEN (COO)

Morten Solbakken started his professional career in 1995 as a satellite system engineer in Telenor International. From there on, he held numerous positions in the Telenor structure dealing in particular with strategy and business development around the pay TV assets as well as the management of Telenor's ownership in international satellite organizations. From 2007 to 2011, he was Chief Strategy Officer in Telenor Broadcast Holding AS (owner of Canal Digital, Telenor Satellite, Norkring and Conax). In March 2011, Mr. Solbakken was appointed COO at Telenor Broadcast Holding, and Chairman of the Boards of Conax, Telenor Satellite and Norkring. Morten Solbakken joined Conax as acting CEO in September 2011 and was made CEO from December 2011 – driving a transformation of the company including the process which led to the acquisition of Conax by the Kudelski Group in April 2014. He became COO, Digital TV and Executive Vice President of the Kudelski Group on January 1, 2018.

Current mandates in the Kudelski Group:

- Digital Video Norge Drift AS, in Norway, Chairman of the Board
- iWedia S.A., in Switzerland, Chairman of the Board
- Kudelski Corporate, Inc., in USA, member of the Board of Directors and Executive Vice-President
- Nagravision AS, in Norway, Chairman of the Board
- Nagravision Sàrl, in Switzerland, Executive Vice President, Chief Operating Officer
- Nagravision Italia Srl, in Italia, Chairman of the Board
- NexGuard Labs B.V., in Netherlands, Director
- NexGuard Labs Netherlands B.V., in Netherlands, Director
- SmarDTV SA, in Switzerland, member of the Board of Directors
- Nagravision Iberica SLU, in Spain, Board member
- NexGuard Labs France S.A.S., in France, Director (until December 13, 2018)
- Open TV, Inc., in USA, member of the Board of Directors (until July 31, 2019)
- Digital Video Norge Holding AS, in Norway, Chairman of the Board (until August 20, 2020)
- Digital Video Health AS, in Norway, Chairman of the Board (until September 23, 2020)
- Techno Venture AS, in Norway, Chairman of the Board and Managing Director (until July 30, 2020)
- Kudelski Norway AS, in Norway, executive Board member and Managing Director (until August 31, 2020)

Other mandates:

- Telenor Satellite AS, in Norway, member of the Board of Directors

NANCY GOLDBERG (CMO)

Nancy Goldberg started her professional career in 1982 as an independent athlete (Rock Climber and Snowboarder) and pursued this competitive life until 1992. Nancy Goldberg then started a new and challenging career path in the media & entertainment industry ("M&E industry"). For 6 years she worked in different companies, starting as a line producer and an investment analyst. In 1999, Nancy Goldberg joined Technicolor Inc. as a financial analyst for the Home Entertainment division. During her 5-year tenure, she became VP Operational Finance, Creative Services and negotiated strategic acquisitions and partnerships in the US and Europe for the post-production market within the M&E industry. From 2004 to 2008, Nancy Goldberg was with Ascent Media Group LLC where, in her final role as VP, Corporate Development, she had global responsibilities that included integrated digital service offerings, negotiating strategic partnerships and developing market opportunities with the major film studios, production companies and sports franchises. After 18 months as a VP Strategic Business Development for RealNetworks, Inc., Nancy Goldberg worked for Technicolor, Inc. from 2010 to 2015 as SVP Global Strategic Accounts where she was responsible for all sales and marketing activities for her major studio customers and developed business models enabling new technologies and services for content protection, distribution and consumption activities. In 2015, Nancy Goldberg joined Deluxe Entertainment Service Group Inc. as SVP Head of Global Strategic Accounts where she served as primary account manager for Warner Bros and 21st Century Fox, as well as OTT providers such as Netflix, Amazon, Apple and Google. Additionally, Nancy Goldberg had oversight for the transition of a portion of Warner Bros technical in-house operations to Deluxe. In 2017, Nancy Goldberg decided to become a Strategic Business Consultant for various companies developing key business and partnership opportunities, helping to identify the intrinsic value of technologies, products and services for their customers. In December 2018, Nancy Goldberg joined Amazon Web Services as a consultant within their Professional Services Group, acting as a M&E industry expert and working with the major studios and OTT organizations such as Warner Bros, Disney and Hulu. In June 2019, Nancy Goldberg joined the Kudelski Group as Chief Marketing Officer, in charge of the sales and marketing of the Kudelski Group's Digital TV division and as Executive Vice President and member of the Executive Board of Kudelski SA.

Current mandates in the Kudelski Group:

– Kudelski Security, Inc, in USA, Board member
– Kudelski Security Holdings, Inc., in USA, Board member and Executive Vice President
– Kudelski Corporate, Inc., in USA, Board member and Executive Vice President
– Nagravision India Private Limited, in India, Board member
– Nagra USA LLC., in USA, Executive Vice-President
– OpenTV, Inc., in USA, Board member and Executive Vice President
– Nagravision Asia Pte. Ltd. in Singapore, Director
– NexGuard Labs USA, Inc., in USA, Board member (until June 24, 2020)

4.2. Other activities and vested interests

Please refer to the individual profiles of members of the Executive Board under section 4.1 above.

4.3. Articles of association on the number of permitted activities

In accordance with section 25 of the articles of association, members of the Executive Board may exercise no more than two mandates in senior management or administrative bodies of third-party legal entities whose shares are listed on a stock exchange and no more than five mandates in other third-party legal entities. They may also exercise up to ten mandates in senior management or administrative bodies of non-profit or charitable third party legal entities.

A company is not considered a third-party legal entity according to this provision, and is therefore not taken into account when calculating the maximum number of mandates mentioned above, if:

1. it controls the company directly, indirectly or jointly with third parties, or is controlled by it; or

2. it does not have to be listed in the Commercial Register or in a corresponding foreign register (e.g. corporations and public entities, non-profit associations, religious foundations or family foundations); or

3. the mandate is carried out at the company's request.

Mandates carried out for legal entities directly or indirectly controlled by a single individual or legal entity, or by a single group of individuals or legal entities acting in concert, or at the request of one of these individuals or legal entities, are deemed to constitute a single mandate for the purposes of this provision.

For members of the Executive Board who are also members of the Board of Directors, the maximum number of mandates in the senior management or administrative bodies of third-party legal entities is governed exclusively by Article 18 paragraphs 7 to 10 and as mentioned above in section 3.3 of this report.

4.4. Management contracts

As of December 31, 2021, Kudelski SA and its subsidiaries had not entered into any management contract with companies outside the Group.

5. Compensation, shareholdings and loans

For details relating to the compensation, shareholdings and loans to members of the Board of Directors and Executive Board of Kudelski SA, please refer to the 2021 compensation report.

6. Shareholders' participation rights

The provisions of the articles of association governing the participation rights of shareholders are in compliance with the law as set out in the Swiss Code of Obligations. The articles of association of Kudelski SA may be found on the Kudelski Group website via the following link: https://www.nagra.com/investors/publications.

6.1.Voting rights restrictions and representation

6.1.1. In accordance with the articles of association of Kudelski SA, there are no restrictions on voting rights and no statutory Group clauses or rules on granting exceptions.

6.1.2. There are currently no statutory provisions on granting instructions to an independent representative or on any form of participation in the General Meeting by electronic means.

6.2. Quorum required by the articles of association

The articles of association of Kudelski SA do not impose any majority higher than contemplated by law for resolutions of the General Meeting of Shareholders.

The General Meeting is validly constituted regardless of the number of shareholders present and/or the number of shares represented.

6.3. Convocation of the General Meeting of Shareholders

The General Meeting of Shareholders must be called at least 20 days before the date of the meeting. The notice of the General Meeting is published in the Swiss Official Gazette of Commerce.

6.4. Inclusion of items on the agenda

Items on the agenda are mentioned in the notice. Regarding rules for adding items to the agenda, the articles of association of Kudelski SA do not contain provisions that differ from the Swiss Code of Obligations, namely Art. 699 CO, which provides that "shareholders who represent shares totaling a nominal value of CHF 1 million* may request that an item be included in the agenda. The calling and the inclusion of an item on the agenda must be requested in writing listing the items and motions."

* *This represents 0.23% of the capital of Kudelski SA or 0.13% of the voting rights.*

6.5. Entries in the share register

Kudelski SA shares that can be traded on the SIX Swiss Exchange are bearer shares; consequently, there is no register of shareholders for this category of shares.

7. Changes of control and defense measures

7.1. Duty to make an offer

Kudelski SA has no provision in its articles of association on "opting-out" within the meaning of Article 125 para. 3 or 4 of the Federal Act on Financial Market Infrastructure (FMIA) or "opting-up" within the meaning of Article 135 para. 1 LIMF. This means that if a shareholder reaches the limit laid down by the Swiss Financial Market Infrastructure Act (art. 135 LIMF: 33⅓% of the voting rights), he will be required by the same law to submit a takeover bid on all bearer shares of the company that it does not yet hold, at the minimum price defined in Article 135 para. 2 LIMF.

7.2. Clauses on changes of control

To the knowledge of the Group, no such agreement exists.

8. Auditors

8.1. Duration of the mandate and term of office of the lead auditor

The auditors of Kudelski SA are PricewaterhouseCoopers SA (Lausanne). Some companies affiliated with the Group are audited by other auditors. The auditors were reappointed by the Annual General Meeting of Shareholders of Kudelski SA of April 15, 2021 for a statutory period of one year. The PricewaterhouseCoopers SA mandate began in 1985. It has been under the responsibility of Mr. Luc Schulthess since January 1, 2017. The auditor in charge is replaced at the latest seven years after the year in which he/she first occupied this position, as specified in Article 730a paragraph 2 of the Swiss Code of Obligations.

8.2. Auditing fees

The Kudelski Group paid PricewaterhouseCoopers the sum of CHF 808 000 for auditing services for the year 2021. Auditing services are understood to mean the work required each year to examine the consolidated accounts of the Group and its subsidiaries and to prepare the reports required under the laws of each country.

8.3. Additional fees

The Kudelski Group paid PricewaterhouseCoopers for additional services for the year 2021 the sum of CHF 828 000 representing CHF 807 000 for tax advisory services and CHF 21 000 for other additional services. Additional services mean in particular services such as the occasional accounting review of transactions and other services such as review of new or modified accounting methods.

8.4. Information instruments pertaining to the external audit

The aim of the Audit Committee of the Board of Directors is to provide effective and regular supervision of the company's financial reporting processes in order to ensure their integrity, transparency and quality. To this end, it is responsible for monitoring the work, including additional services, of the external auditors.

PricewaterhouseCoopers provides the Audit Committee with a detailed report before each Committee meeting regarding the execution and results of its work for the Kudelski Group, proposals to correct or improve identified problems and the implementation status of decisions made by the Audit Committee.

The auditor's representatives, including the auditor in charge of the Group's audit, are regularly invited to take part in meetings of the Audit Committee as external participants.

Representatives from PricewaterhouseCoopers were invited this year to all three meetings of the Audit Committee. They do not participate in any discussions and decisions of the Audit Committee regarding the auditors. For more information on the Audit Committee, and particularly on the selection, evaluation and independence criteria please refer to sections 3.5.2 and 3.5.3 above.

9. Information policy

The Kudelski Group keeps investors regularly informed of the following developments:

- progress of business and major new contracts;
- changes in the management of the Group;
- acquisitions or sales of companies; and
- half-year and annual financial results.

Press releases are issued in compliance with the rules in force of the SIX Exchange Regulation concerning ad hoc publicity and are available on the Group's website simultaneously with their publication. A link on the home page of the Group's web site allows direct access to press releases. The Group communicates as often as necessary in this manner. Press releases are generally published in French and in English. In certain specific cases, a German version is also provided. They are available in these languages on the website.

Persons wishing to receive Kudelski Group press releases may subscribe to a mailing list using a form available on the Kudelski Group website https://www.nagra.com/media/subscription.

Financial results are presented to investors and financial analysts during a press conference held twice a year. Persons invited can also follow the conference by audio webcast.

The Group's website is a regularly updated source of information. The Investor Relations section contains a list of the principal dates of the corporate calendar (publication of results, Annual General Meeting and presence at major trade shows) as well as the Group's main publications (annual report and half-year report). Mr. Santino Rumasuglia is in charge of investor relations (+1 480 430 9952, +41 79 373 66 71, santino.rumasuglia@nagra.com).

The Group's main website links and e-mail addresses are on the last page of this report.

Important dates

- April 21, 2022: Annual General Meeting, Cheseaux-sur-Lausanne, Switzerland

- August 25, 2022: Publication of the Interim Financial Report and Press Conference

COMPENSATION REPORT

1. Introduction

This report discloses certain information required by the SIX Swiss Exchange Directive on Information relating to Corporate Governance and the Ordinance against Excessive Compensation at Listed Joint-Stock Companies (OaEC). Sections 7 and 8 of this Compensation Report are audited. Unless otherwise mentioned, the information provided in this report reflects the situation as of December 31, 2021.

This Compensation Report refers to the articles of association of the Company, which are available at the following address: https://www.nagra.com/investors/publications

2. Compensation approval by General Meeting

In compliance with section 28 of the articles of association, upon the proposal of the Board of Directors, each year the Annual General Meeting shall separately approve the maximum aggregate amount of compensation awarded to the Board of Directors and the Executive Board. The Board of Directors shall submit a separate proposal to the vote of the Annual General Meeting regarding:

- the maximum aggregate amount granted to the Board of Directors for the compensation of its members for the period up to the following Annual General Meeting; and
- the maximum aggregate amount granted to the Executive Board for the fixed and variable compensation of its members for the following periods, respectively: as regards fixed compensation, the period from the beginning of July of the current fiscal year through the end of June of the following fiscal year; as regards variable compensation, the current fiscal year.

The Board of Directors may submit proposals to the Annual General Meeting regarding compensation for different periods affecting all members of the Board of Directors or the Executive Board or only certain members.

Votes at the Annual General Meeting on compensation related proposals are binding. If one or more of the aforementioned amounts are rejected at the Annual General Meeting, the Board of Directors shall make an alternative proposal for approval at the same Annual General Meeting or a subsequent General Meeting. Compensation payments for activities by members of the Board of Directors and the Executive Board in other legal entities directly or indirectly controlled by the Company are authorized. Compensation paid by these legal entities is included as part of the compensation submitted for approval at the Annual General Meeting.

The Company, or any other legal entity directly or indirectly controlled by it, may pay compensation prior to its approval at the Annual General Meeting, subject to subsequent approval and an obligation to repay such compensation in the event it is not approved at the General Meeting.

In compliance with section 29 of the articles of association, if the maximum global compensation of the Executive Board already approved at the General Meeting is insufficient to cover compensation of members appointed after this approval, the Company or legal entities controlled by it, may grant an additional amount for the compensation period already approved to remunerate and/or compensate for benefits the new member gave up or lost due to his/her change in employment. The additional amount shall not exceed 150% of the position replaced or the highest fixed compensation of the other members of the Executive Board on a pro rata temporis basis up until the end of the period for which the compensation was already approved.

3. Principles of compensation

The Compensation and Nomination Committee has adopted a compensation policy aligning the interests of Executive Board members with the Group's mid- and long-term strategy and shareholders' interests. Pursuant to this policy, compensation is based on the following principles:

- coherence of compensation levels with the tasks, workload and responsibilities assumed;
- appropriate match between compensation levels and current business, trends and evolution of the market and competitive environment of the Group as well as the mid- and long-term strategy of the Group;
- global assessment (not individually-based) of compensation to encourage a long-term vision of the Group's interests; and
- for Executive Board members, pay for performance to support both short-term and long-term Group objectives.

The Compensation and Nomination Committee (see section 3.5.2 of the Corporate Governance report) strives to maintain a competitive remuneration policy that ensures global compensation of the Executive Board members is comparable with those of their peers at multinational companies operating in the fields of digital television, cybersecurity and the Internet in Switzerland, in high technology centers, such as the West Coast of the USA, and in Western Europe. In addition, the Compensation and Nomination Committee aims to limit dilution of the capital of the Company by using equity as part of compensation only for a limited number of senior members of management, including the Executive Board (see section 4.2 below).

The Compensation and Nomination Committee does not use benchmarks or compensation consultancy services. It makes its own assessment of the compensation practices of the following types of companies:

– high technology companies listed on the Nasdaq or NYSE;

– high technology companies listed on the Euronext;

– high technology companies listed on the SIX Swiss Exchange and belonging to the Swiss Performance Index (SPI), Technology sector; and

– privately held high technology companies.

Specifically, the Committee assesses those companies from which prospective employee candidates may be employed or to which the Group may have lost prospective candidates, as well as competitors that are of a similar size and face comparable operational complexity as the Group. Such assessments also take into account the business environment in which the Group operates and the rapid pace of evolution required for success.

Due to the unique characteristics of the Group, including the breadth and variety of its products and services, the rapid evolution of its technologies and markets and the fast-moving competitive environment in which the Group operates, the Compensation and Nomination Committee considers that it is difficult to make direct comparisons with other companies and believes that the aforementioned elements are sufficient for purposes of its compensation policy.

The level of remuneration of the non-executive members of the Board of Directors is determined by their role with the Board of Directors and its Committees. The elements of their compensation are set out in section 4.1.

The total annual compensation of members of the Executive Board includes a fixed and a variable component. The variable component depends on the Group's results (both economic and strategic), the level of responsibility assumed and individual performance, which factors can in the aggregate have a positive or negative impact on the variable compensation of each Executive Board member. Variable compensation helps align the interests of Executive Board members with company strategy and shareholders' interests and ultimately seeks to reward value creation. The variable component is not expressed as a percentage of fixed compensation (see also section 4.2).

Currently, there are no provisions providing for a particular allowance or benefit – including with regard to blocking or vesting periods applicable to shares – in the event of a termination of the employment contract of an Executive Board member, in the event of a departure of a member of the Board of Directors or in the case of a change of control of the company. Executive Board members have employment contracts with an unlimited term and with a maximum of eleven month's termination notice expiring on the last day of a calendar month, both of which help promote stability within the management of the Group.

4. Elements of compensation

Section 7 sets forth the compensation paid to the members of the Board of Directors and Executive Board in accordance with OaEC requirements.

The elements of compensation for non-executive members of the Board of Directors are different than for executive members of the Board of Directors and the Executive Board members.

4.1. Members of the Board of Directors

In compliance with section 30 of the articles of association, the compensation of non-executive members of the Board of Directors is composed of a fixed annual fee, paid in cash, and an expense allowance.

Specific tasks or services performed for the Group by a non-executive member of the Board of Directors that fall outside of such member's Board responsibilities are generally compensated in cash and based on arm's length terms and conditions.

4.2. Members of the Executive Board

In compliance with sections 30 paragraphs 4, 31 and 32 of the articles of association (https://www.nagra.com/sites/default/files/STATUTS_Kudelski_2022_02_22.pdf), the total annual compensation of the executive members of the Board of Directors and of the Executive Board members includes a fixed salary and a variable component.

Compensation is generally paid in a combination of cash, shares and payment in kind (including provision of a company car and reimbursement of all or part of health insurance premiums). The fixed salary is in principle paid in cash. The Compensation and Nomination Committee has discretionary authority to determine how the variable component is paid, taking into account such criteria as the dilutive effect of any share issuances.

A maximum of 50% of the variable compensation may be paid in Kudelski SA bearer shares that are blocked for a period of three or seven years at the election of the Executive Board member. Each Executive Board member may also elect to participate in the Group's share purchase plan adopted in 2004 (see section 2.7 of the Corporate Governance Report: Share purchase plan).

The total compensation of each Executive Board member is linked to his/her individual performance as well as the strategic, economic and operational performance of the Group. Key factors impacting variable compensation levels include the overall performance of the Group and its divisions, performance against the applicable member's department budget, contribution to strategic initiatives, achievement of individual objectives and the quality of management by such Executive Board member. Objectives of the Group are discussed and approved on a yearly basis by the Board of Directors, Strategy Committee, Compensation and Nomination Committee and Chief Executive Officer. Once approved, Group objectives are shared with the Executive Board members who, in addition to their individual performance objectives, shall have responsibility for achieving such objectives as determined by the Chief Executive Officer in agreement with the Compensation and Nomination Committee.

The Compensation and Nomination Committee assesses the achievement of Group objectives and of each Executive Board member's individual performance objectives. The Committee has discretionary authority to determine the relative weighting of the Group objectives and individual performance objectives as part of its assessment for determining the total compensation of each Executive Board member. In addition, the Compensation and Nomination Committee has the discretion to apply a positive or negative performance factor to each individual performance objective, which recognizes achievement or failure of individual performance objectives. This practice is designed to encourage each member of the Executive Board to optimize his/her performance against objectives.

5. Procedure for determining compensation

The Compensation and Nomination Committee determines the compensation policy and sets the compensation of each member of the Executive Board and the Board of Directors, other than the compensation of the Committee members which is decided by the full Board of Directors (see section 3.5.2 of the Corporate Governance Report, Compensation and Nomination Committee section). The Compensation and Nomination Committee reports every year on its activities to the Board of Directors.

The Chairman of the Board of Directors is invited to take part in the Committee's discussions related to compensation, other than discussions relating to the Chairman's own compensation.

Each year, the Compensation and Nomination Committee reassesses its compensation policy and determines the annual compensation of the Board of Directors and Executive Board members. Generally, this occurs during the first quarter of the year. During the same period, the Chief Executive Officer reviews the performance objectives of the Executive Board and presents his recommendations to the Board of Directors. The full Board of Directors will also determine the compensation of the members of the Compensation and Nomination Committee.

6. Special information regarding 2021

6.1. Changes to the compensation policy during the year under review

No major change was made to the Group's compensation policy for the 2021 financial year. Shares granted to Executive Board members as part of their variable compensation were blocked for periods of three or seven years (see section 7).

6.2. Special information regarding 2021

The compensation of each Executive Board member is determined globally, and the variable compensation of the Executive Board members is not based on the fixed salary as specified in section 3. The variable compensation of each Executive Board member represented between 50.0% and 60.0% of his total compensation, except for the Chief Executive Officer (see section 7). There is no pre-determined ratio between the variable component and the fixed salary; such ratio may be different from year to year. The different ratios of fixed to variable compensation among Executive Board members are based on their function and responsibilities within the Group and market practices.

7. Compensation granted to members of the Board of Directors and members of the Executive Board

Total compensation paid directly or indirectly by Kudelski SA or one of its affiliated companies in 2021 and 2020 to former and current members of the Board of Directors and Executive Board is described below. Compensation does not include reimbursement for business expenses incurred by members in the course of performing their responsibilities or representation allowances, which are not considered as compensation by the Swiss fiscal authorities.

The value of shares granted is determined according to the market value at the time of grant, as quoted on the SIX Swiss Exchange and adjusted by a discount factor of 6% for each year that such shares are blocked from sale or transfer. Such discount factor is determined in accordance with the principles applied by Swiss fiscal authorities. 232 661 (2020: 171 891) bearer shares were allocated to members of the Executive Board with a seven-year blocking period. In 2021, no bearer shares were allocated to members of the Executive Board (2020: 19 789) with a three-year blocking period. Shares granted as part of variable compensation for fiscal years 2021 and 2020 were granted at the beginning of the respective following year.

YEAR 2021	BASE COMPENSATION IN CASH CHF	VARIABLE COMPENSATION IN CASH CHF	VARIABLE COMPENSATION IN KUDELSKI SHARES (NUMBER)	VARIABLE COMPENSATION IN KUDELSKI SHARES CHF	OTHER * CHF	TOTAL 2021 CHF
BOARD OF DIRECTORS						
KUDELSKI ANDRÉ Chairman	550 004	– –	–	– –	–	**550 004**
SMADJA CLAUDE Vice Chairman	130 000	–	–	–	6411	**136 411**
DASSAULT LAURENT Member	110 000	–	–	–	5 278	**115 278**
FOETISCH PATRICK Member	60 000	–	–	–	14 485 **	**74 485**
KUDELSKI MARGUERITE Member	50 000	–	–	–	3 453	**53 453**
LESCURE PIERRE Member	120 000	–	–	–	5 845	**125 845**
ROSS ALEC Member	70 000	–	–	–	4 834	**74 834**
HENGARTNER MICHAEL Member	40 000	–	–	–	2 762	**42 762**
TOTAL BOARD MEMBERS	1 130 004	–	–	–	43 069	**1 173 073**

YEAR 2021	BASE COMPENSATION IN CASH CHF	VARIABLE COMPENSATION IN CASH CHF	VARIABLE COMPENSATION IN KUDELSKI SHARES (NUMBER)	VARIABLE COMPENSATION IN KUDELSKI SHARES CHF	OTHER *** CHF	TOTAL 2021 CHF
MANAGEMENT						
KUDELSKI ANDRÉ CEO	569 017	3 891 829	140 000	330 349	147 586	**4 938 781**
OTHER MEMBERS	1 498 012	1 530 549	92 661	218 646	68 276	**3 315 483**
TOTAL MANAGEMENT	2 067 029	5 422 379	232 661	548 995	215 862	**8 254 264**

* *This section includes social security charges.*
** *Compensation paid for his legal services rendered to several Group companies.*
*** *This section includes long service benefits and benefits in kind as well as expenditures constituting or increasing pension benefits.*

Two members of the management received their remuneration in USD. One member received part of the 2021 compensation in USD, which was converted using a 0.91422 exchange rate for 2021.

YEAR 2020	BASE COMPENSATION IN CASH CHF	VARIABLE COMPENSATION IN CASH CHF	VARIABLE COMPENSATION IN KUDELSKI SHARES (NUMBER)	VARIABLE COMPENSATION IN KUDELSKI SHARES CHF	OTHER * CHF	TOTAL 2020 CHF
BOARD OF DIRECTORS						
KUDELSKI ANDRÉ Chairman	550 004	–	–	–	–	**550 004**
SMADJA CLAUDE Vice Chairman	130 000	–	–	–	6 322	**136 322**
DASSAULT LAURENT Member	65 000	–	–	–	2 716	**67 716**
FOETISCH PATRICK Member	60 000	–	–	–	48 386 **	**108 386**
KUDELSKI MARGUERITE Member	50 000	–	–	–	3 439	**53 439**
LESCURE PIERRE Member	129 046	–	–	–	5 765	**134 811**
ROSS ALEC Member	70 000	–	–	–	4 814	**74 814**
HENGARTNER MICHAEL Member	40 000	–	–	–	2 751	**42 751**
TOTAL BOARD MEMBERS	1 094 050	–	–	–	74 194	**1 168 244**

YEAR 2020	BASE COMPENSATION IN CASH CHF	VARIABLE COMPENSATION IN CASH CHF	VARIABLE COMPENSATION IN KUDELSKI SHARES (NUMBER)	VARIABLE COMPENSATION IN KUDELSKI SHARES CHF	OTHER *** CHF	TOTAL 2020 CHF
MANAGEMENT						
KUDELSKI ANDRÉ CEO	573 519	3 307 423	120 000	286 508	133 389	**4 300 839**
OTHER MEMBERS** **	1 518 249	1 337 370	71 680	183 542	121 397	**3 160 559**
TOTAL MANAGEMENT	2 091 768	4 644 793	191 680	470 050	254 787	**7 461 398**

YEAR 2020	BASE COMPENSATION IN CASH CHF	VARIABLE COMPENSATION IN CASH CHF	VARIABLE COMPENSATION IN KUDELSKI SHARES (NUMBER)	VARIABLE COMPENSATION IN KUDELSKI SHARES CHF	OTHER *** CHF	TOTAL 2020 CHF
FORMER MANAGEMENT MEMBERS ****	10 492	–	–	–	45 915	**56 407**
FORMER MEMBERS	10 492	–	–	–	45 915	**56 407**

* *This section includes social security charges.*

** *Compensation paid for his legal services rendered to several Group companies.*

*** *This section includes long service benefits and benefits in kind as well as expenditures constituting or increasing pension benefits.*

**** *Mr. Pierre Roy was a member of the Executive Board until August 1, 2019. Mr. Pierre Roy's retirement from the Group and his compensation for 2019 is described in section 6.2 of this Compensation Report. This row details the compensation received by Mr. Roy from January 1, 2020 to January 31, 2020.*

Two members of the management received their remuneration in USD. One member received part of the 2020 compensation in USD, which was converted using a 0.93865 exchange rate for 2020. Another member received part of the 2020 compensation in NOK, which was converted using a 9.99629 exchange rate.

8. Shareholdings and loans granted to members of the Board of Directors and members of the Executive Board

In compliance with section 33 of the articles of association, loans may be granted to a member of the Board of Directors or the Executive Board only under market conditions and, at the time they are granted, may not exceed the most recent total annual compensation of the member in question. Moreover, in compliance with section 28 paragraph 6, the Company, or any other legal entity directly or indirectly controlled by it, may pay compensation prior to its approval at the Annual General Meeting, subject to subsequent approval and an obligation to repay such compensation in the event it is not approved at the Annual General Meeting.

As of December 31, 2021 and 2020, no guarantees, loans, advances or borrowings in favor of members of the Board of Directors, members of the Executive Board or individuals closely related to such persons were outstanding.

9. Retirement benefits in addition to pension benefits schemes granted to members of the Board of Directors and members of the Executive Board

In compliance with section 34 of the articles of association, the Company, or legal entities controlled by the Company, may grant retirement benefits in addition to pension benefits schemes offered by the Company, or legal entities controlled by it, to members of the Board of Directors or the Executive Board. For a given annual compensation period, the value of such retirement benefits may not exceed the most recent total annual compensation of the member in question.

In addition, the Company or entities controlled by the Company may grant an annuity payment to former members of the Board of Directors or the Executive Board as retirement benefits in addition to pension benefits schemes offered by the Company or legal entities controlled by the Company. For each individual affected, the amount paid in this manner may not, for a one year period, exceed 30% of the last annual base salary of the person in question prior to his/her retirement. In lieu of an annuity, the Company may pay the retirement benefit as a lump sum payment, in which case, the amount is calculated according to actuarial calculation methods.

As of December 31, 2021 and 2020, no retirement benefits in addition to pension benefits schemes were in favor of members of the Board of Directors, members of the Executive Board or in favor of individuals closely related to such persons.

Report of the statutory auditor

to the General Meeting of Kudelski S.A.

Cheseaux-sur-Lausanne

We have audited the accompanying remuneration report of Kudelski S.A. for the year ended 31 December 2021.

Board of Directors' responsibility

The Board of Directors is responsible for the preparation and overall fair presentation of the remuneration report in accordance with Swiss law and the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (Ordinance). The Board of Directors is also responsible for designing the remuneration system and defining individual remuneration packages.

Auditor's responsibility

Our responsibility is to express an opinion on the accompanying remuneration report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the remuneration report complies with Swiss law and articles 14–16 of the Ordinance.

An audit involves performing procedures to obtain audit evidence on the disclosures made in the remuneration report with regard to compensation, loans and credits in accordance with articles 14–16 of the Ordinance. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements in the remuneration report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of remuneration, as well as assessing the overall presentation of the remuneration report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the remuneration report of Kudelski S.A. for the year ended 31 December 2021 complies with Swiss law and articles 14–16 of the Ordinance.

PricewaterhouseCoopers SA

Luc Schulthess	Nicolas Daehler
Audit expert Auditor in charge	Audit expert

Lausanne, 14 March 2022

Enclosure:

- Remuneration report

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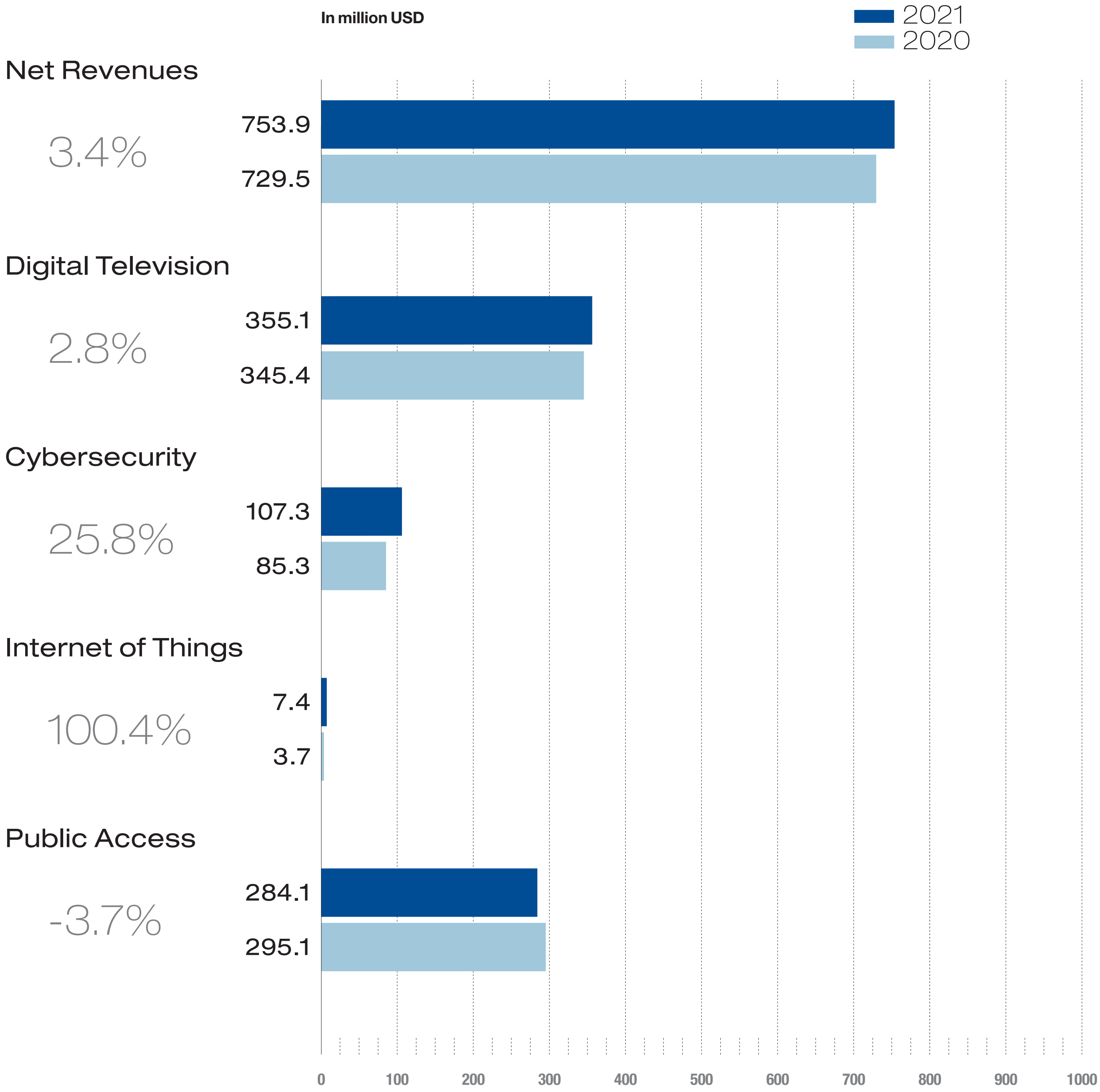
FINANCIAL OVERVIEW AND STATEMENTS

FINANCIAL OVERVIEW

In 2021, the Kudelski Group's total revenues and other operating income increased to USD 778.8 million from USD 741.5 million in 2020, reflecting higher sales in Digital TV, Cybersecurity and IoT. The Group generated EBITDA of USD 72.4 million, a USD 8.0 million improvement from the previous year. Overall, the Group generated net income of USD 20.4 million, an increase of USD 38.3 million over 2020.

Cash flow generation was a key focus for 2021. The Group delivered strong profitability and continued to manage prudently working capital and capital expenditures to optimize cash flows. As a result, the Group generated USD 89.5 million of operating free cash flow for the year. In addition, the Group generated net cash of USD 104.2 million from the sale and leaseback of its facilities in the Lausanne, Switzerland area and from the sale of a building in the south of France, related to a divested activity. Strong cash generation enabled the Group to reduce net debt by USD 182.4 million to USD 152.4 million at the end of 2021. The Group's leverage ratio (net debt over EBITDA) improved from 5.2x to 2.1x at the end of 2021.

GROUP REVENUES
BREAKDOWN BY SEGMENT



Group results

Cash flow generation was a key focus for 2021. The Group delivered strong profitability and continued to manage prudently working capital and capital expenditures to optimize cash flows. As a result, the Group generated USD 89.5 million of operating free cash flow for the year. In addition, the Group generated net cash of USD 104.2 million from the sale and leaseback of its facilities in the Lausanne, Switzerland area and from the sale of a building in the south of France. Strong cash generation allowed the Group to reduce net debt by USD 182.4 million to USD 152.4 million at the end of 2021.

Digital TV delivered strong results in 2021, with year-on-year revenue growth and a USD 97.3 million EBITDA, reflecting continued strong cost discipline. The Group's Cybersecurity business accelerated its growth momentum with solid growth rates of 21.4% in Europe and 27.8% in the US. IoT more than doubled its revenues and other operating income, reaching USD 8.2 million in 2021, with strong adoption of its new asset tracking product underpinning its growth. Public Access continues to be affected by COVID-19, as large customers, including in particular airports, shopping centers and stadiums, postponed new deployments and asset refreshment projects. Demand in the North American Public Access market remains subdued, as traffic and usage of parking infrastructure in major metropolitan areas continue to lag pre-COVID levels.

In 2021, total revenues and other operating income increased from USD 741.5 million to USD 778.8 million. Net revenues for the Group increased by 3.4% to USD 753.9 million, reflecting higher sales in Digital TV, Cybersecurity and IoT. Other operating income increased by USD 12.8 million to USD 24.9 million, mainly due to a USD 13.7 million net gain from the sale and leaseback transactions.

Margin after cost of material increased from USD 529.9 million to USD 554.1 million. Relative to total revenues, margin after cost of material decreased from 71.4% to 71.1%.

Compared to 2020, the Group increased personnel expenses by USD 18.1 million in 2021. While targeted streamlining measures resulted in a reduction of total Group headcount, the phasing out of partial unemployment measures drove personnel costs higher.
In addition, operating expenses in 2020 included a one-off USD 10.0 million positive effect related to the accounting treatment of the Group's pension fund in Switzerland. Compared to the end of 2020, total Group Full Time Equivalents (FTEs) marginally decreased by 33 to 3'225 at the end of the year. The Group rebalanced headcount between Digital TV and both Cybersecurity and IoT, while streamlining of SKIDATA operations in the US resulted in the reduction of 29 FTEs.
Compared to 2020, the Group cut USD 1.9 million of other operating expenses in 2021, primarily by continuing to reduce travel expenses.
For the full year, the Group generated USD 72.4 million of operating income before depreciation and amortization, an USD 8.0 million improvement from the previous year. At USD 42.1 million, depreciation, amortization and impairment were USD 6.2 million lower than in 2020, as the Group consistently reduced capital expenditures over the last reporting periods. Overall, the Group generated an operating income of USD 30.2 million, an increase of USD 14.2 million compared to 2020.
At USD 9.8 million, interest expense was USD 0.6 million lower than in the prior year. The Group posted USD 2.1 million of net finance income, primarily due to net foreign exchange gains. Income tax expense was USD 3.2 million, compared to USD 10.7 million in 2020. Net income from continuing operations in 2021 was USD 21.5 million. The sale of a building in France formerly hosting SmarDTV, a subsidiary sold in 2018, generated a USD 1.1 million loss. Overall, the Group booked net income of USD 20.4 million, representing a USD 38.3 million improvement over 2020.

Digital TV

Digital TV delivered a strong 2021, increasing net revenues by 2.8% to USD 355.1 million and EBITDA by 0.4% to USD 97.3 million, compared to 2020 results, which benefitted from a one-off credit of USD 10.0 million from pension fund accounting. In relative terms, Digital TV generated a 27.4% EBITDA margin.

Digital TV continues to benefit from positive momentum from its new product offerings, including Insight, NexGuard, TVKey, OpenTV Platform and system integration services. In 2021, the Group renewed and expanded its Insight contract with Canal+ International, with the introduction of features that measure the attractiveness and economic performance of live channels. The Group's NexGuard watermarking product maintained its momentum with Hollywood, securing an agreement to deploy NexGuard Pre-release cloud watermarking at a major studio. In addition, the Group continues to grow beyond its traditional media and entertainment target market, with the first deployment of watermarking by a global videogame platform and in law enforcement to protect sensitive witness audio content. In the sports domain, the Group maintains its momentum, working with the International Bowling Federation (IBF) to launch a gamified, content-rich loyalty application providing fans and players with a unified access point to experience every aspect of the sport.

The Group's European Digital TV business posted a strong 15.0% growth compared to 2020. Most large European customers were resilient in spite of COVID-19-related market turbulences, so notwithstanding the pandemic, the Group was able to continue growing its partnerships with large operators. For example, the Group supported the deployment of Vodafone TV in Vodafone's German affiliate and the integration of fixed operators in Germany, the Czech Republic, Hungary and Romania. At Altice, the Group extended its footprint to enable streaming and on-demand services across a broad range of open devices, including iOS and Android phones and tablets and a wide variety of smart TVs. Royalty revenues from cardless deployments, including at LGI and several accounts in Africa, were a strong growth driver in 2021, with revenues growing by USD 7.7 million over the previous year. In 2021, the Group also materially increased sales of conditional access modules (CAMs) at operators such as Tivu and Slovak Telekom.

At USD 104.9 million, the Americas business posted 15.8% lower revenues in 2021. South American markets remain weak, still suffering from the negative impacts of the pandemic. In spite of these weaknesses, the Group further strengthened its overall position in South America, with Claro, the largest operator in Brazil, deploying SSP, Nagra's connected security solution. In addition, the Group entered into a multi-year anti-piracy agreement with Claro, introducing watermarking and providing investigation, traffic monitoring and attack response services. In the US, Altice continues to expand its partnership with the Group, though compared to the previous year, overall revenues from this customer declined due to the base effect of a strong 2020. DISH Network generated lower year-on-year revenues due to the declining number of active devices and reflecting the expiry at the end of 2020 of the payment period for a batch of inactive devices.

The Asia/Pacific and Africa region recovered well in 2021, posting 9.3% year-on-year revenue growth. Among the positive highlights, the number of Starhub TV subscribers using OpenTV Video Platform, Nagra Security Services Platform and Connect Player continues to grow. In addition, sales of hybrid IPTV/OTT devices increased over the previous year. In India, the Group continued to extend its footprint, winning a mobile DRM contract with a large over-the-top provider. In the Philippines, the Group benefitted from the expansion of its cardless solution at the leading satellite operator in the country.

Digital TV margin after cost of material decreased from 88.7% to 86.1%, reflecting the higher share of hardware, including conditional access modules and IPTV/OTT devices, in the segment's revenue mix. Digital TV continued to streamline operations, further reducing operating expenses by USD 0.9 million compared to 2020. In 2020, operating expenses included a positive USD 10.0 million one-off credit related to pension fund accounting. Overall, Digital TV further improved operating income before depreciation and amortization by USD 0.4 million to USD 97.3 million. As depreciation and amortization was USD 3.6 million lower, the segment's operating income increased by USD 4.0 million to USD 76.0 million in 2021.

Cybersecurity

In 2021, the Group's Cybersecurity business posted USD 167.1 million of gross revenues, a 19.4% increase from 2020. Net revenues in 2021 were at USD 107.3 million, representing a growth of 25.8% over the prior year. The business benefitted from growth across both of its regions. In Europe, net revenues grew by 21.4% to USD 32.4 million, while the Americas grew by 27.8% to USD 74.9 million.

Margin after cost of material increased to USD 56.5 million, representing 16.7% growth from the previous year. In relative terms, margin after cost of material decreased from 56.7% to 52.7%, as the relatively lower gross margin technology reselling business in the US was materially higher compared to the prior year. The growth of Cybersecurity bookings underscores the positive momentum of this business. In 2021, the Cybersecurity segment generated USD 207.9 million of total bookings, growing by 16.8% compared to the prior year. Bookings in high value-added business lines, including managed security services, advisory and proprietary technology sales, continue to grow and have reached 42.2% of the total 2021 bookings. Managed Detection and Response (MDR) services, including the newly launched Fusion-Detect cloud-native analytics platform, were among the key drivers of growth. This offering reduces the complexity of security monitoring to deliver effective threat detection and response services across environments, including endpoint, on-premises, cloud, and OT/ICS (operational technology/industrial control systems).

In 2021, the Group accelerated its investment in the expansion of the cybersecurity business, increasing headcount in both Europe and the Americas to maintain its growth momentum. As a result, the segment's operating expenses increased by USD 8.0 million compared to the previous year. The Cybersecurity segment posted a USD 17.4 million operating loss before depreciation and amortization, an improvement of USD 0.1 million from the previous year. Operating loss decreased by USD 2.1 million to USD 20.4 million.

Internet of things (IoT)

In 2021, the Group's IoT business launched RecovR, a two-in-one lot management and theft recovery solution. RecovR enables car dealers to manage their lots efficiently, improve the sales process and create a new revenue stream, while offering consumers an advanced and reliable wireless theft recovery solution. Despite the semiconductor shortages affecting the industry, RecovR ramped-up deployments and established strong sales momentum in the later months of 2021, announcing multiple customer wins, including the Niello Group and Folsom Lake Ford, and growing monthly revenues at double-digit rates. As of December 2021, 43 rooftops generated RecovR revenues.

The Group also opened new distribution channels for keySTREAM, entering into new agreements with some of the world's most prominent contract manufacturers who will offer keySTREAM's security capabilities to their customers. The KeySTREAM security and device management system empowers IoT product developers to securely connect, manage and update their IoT devices and supports a wide variety of critical functionalities, including zero-touch provisioning, late provisioning, end-to-end data protection, remote feature enablement/monetization, and secure firmware updates over the air.

IoT Services continued to acquire new customers and to grow its service portfolio. As part of this portfolio, Kudelski IoT Labs offers certification services for Amazon Alexa Built-in devices, Zoom and AT&T/FirstNet.

Overall, the IoT segment generated USD 8.2 million of total revenues and other operating income, more than double the USD 3.8 million generated in 2020.

The Group expanded IoT's operations to support the fast-paced growth of the business. In particular, operational expenses increased, as the business invested in the organizational structure required to successfully launch and scale its RecovR asset tracking deployments. As a result, operating loss before depreciation and amortization increased by USD 4.7 million to USD 21.2 million.

Public Access

COVID-19 continued to affect Public Access results in 2021, as investments in parking installations are still slow to recover. At USD 284.1 million, 2021 segment revenues decreased by 3.7% year-on-year. European sales were 3.4% lower, reaching USD 169.9 million. Italy and the Nordics achieved the best performance in the region, growing at double-digit rates. France, on the other hand, continues to suffer from a low level of activity, resulting in a further decline of revenues from the previous year. Similarly, Austria posted lower 2021 revenues compared to the prior year. In both markets, the shutdown of the 2020/2021 ski season materially affected sales of consumable products.

Demand in the US market remains subdued, as work-from-home in large metropolitan areas in California and on the East Coast continues to affect the utilization of parking facilities. As a result, parking operators continue to postpone investments in access control infrastructure. Investment activities in Latin American markets such as Chile and Mexico also remained soft throughout the year. Overall, Public Access revenues in the Americas declined by 13.7% to USD 71.8 million, reflecting a weak first half and a more resilient second half. On the other hand, the Asia/Pacific and Africa markets strongly recovered, with revenues growing by 17.7% to USD 42.4 million. SKIDATA's Australian affiliate increased its revenue contribution by USD 4.4 million compared to the prior year.

Margin after cost of material relative to revenues further increased from 58.1% to 60.3%, reflecting a higher share of software and service in the SKIDATA business mix. The digitalization of parking infrastructure, with the associated gradual replacement of traditional ticket-based systems with fully automated free-flow solutions, contributes to the increasing weight of software and service revenues in the SKIDATA revenue mix. The COVID-19 pandemic led to a further acceleration of this trend, including in particular a faster migration to digital payment solutions.

In 2021, Public Access reduced operating expenses by USD 1.1 million compared to the previous year. The reduction of operating expenses reflects savings from headcount reduction measures as well as the results of COVID-related cost saving initiatives.

Overall, Public Access generated an operating income before depreciation and amortization of USD 17.3 million, representing USD 0.8 million improvement compared to 2020. For the full year, Public Access posted a marginally positive operating income.

Sale and leaseback transactions

On September 30, the Group announced the sale and leaseback of a satellite office building located in Lausanne, Switzerland for an amount of CHF 19 million.

On December 23, it announced a further sale and leaseback transaction for the properties hosting the Group's headquarters in Cheseaux, Switzerland for an amount of CHF 75 million. This transaction includes two Group office buildings in Cheseaux and the adjacent land. The investor group acquiring the headquarters' properties includes members of the Kudelski family, another longtime shareholder of the Group, the Group's Swiss pension fund and Nagravision, underscoring the commitment of the Group and of its main stakeholders in the Lausanne region.

Concurrently with the closing of these transactions, the Group entered into 15-year lease agreements for the office buildings, with two options for an additional ten-year extension. The total annual rent for the buildings amounts to USD 4.7 million. As a result of these transactions, the Group booked a total of USD 21.3 million of right-of-use assets and USD 59.2 million of lease obligations. The Group generated a USD 5.9 million gain on the sale of the building in Lausanne and a USD 7.8 million gain on the sale of the headquarters' properties in Cheseaux. The total gain on sale is booked as other operating income.

Total cash proceeds from the two transactions amounted to USD 92.8 million, net of the investment retained by Nagravision in the headquarters facilities. In addition, on January 22, 2022, the Group obtained a USD 4.1 million refund of taxes paid on the real estate transaction, which will be included in the 2022 cash flow.

Balance sheet and cash flows

Total non-current assets decreased by USD 77.9 million to USD 592.5 million. The main driver of this decrease is the sale of the Lausanne and Cheseaux facilities. In addition, the overall level of investments in tangible and intangible assets continues to be lower compared to previous years. Tangible fixed assets decreased by USD 53.8 million and intangible assets decreased by USD 18.8 million. Financial assets at amortized costs decreased by USD 9.0 million, reflecting a lower long-term portion of trade accounts receivables due to collections and reclassification to short-term receivables.

Compared to December 31, 2020, total current assets increased by USD 99.9 million to USD 632.9 million as of December 31, 2021. The USD 4.8 million decrease of inventory is mainly due to a reduction of stock levels at SKIDATA, resulting from the streamlining of this business' supply chain. The Group continues to improve collections, decreasing trade receivables by USD 21.0 million, as SKIDATA reduced outstanding receivables by USD 19.9 million. The Group reduced contract assets by USD 7.9 million to USD 36.7 million, driven by the ongoing improvements of SKIDATA's invoicing cycles. Other financial assets at amortized costs decreased by USD 4.8 million, as SKIDATA collected government grant receivables, resulting in a USD 7.3 million reduction of the amount due from state and government institutions.

At the end of 2021, cash and cash equivalents amounted to USD 284.5 million, representing USD 131.9 increase from December 31, 2020.

In December 2021, the Group disposed of a building in France, formerly hosting the headquarters of SmarDTV, a subsidiary divested in 2018. This asset was classified as held for sale in the 2020 balance sheet.

Total equity increased by USD 27.6 million, mainly reflecting USD 20.4 million of net income and USD 13.6 million of other comprehensive income, driven by a reduction of pension fund liabilities. Total non-current liabilities decreased by USD 220.6 million to USD 310.2 million, as USD 202.1 million of liabilities relating to the 2022 bond were reclassified as a short-term liability. Long-term financial debt declined by USD 242.3 million due to the aforementioned reclassification as well as the repayment of USD 8.9 million of long-term bank loans. The Group reduced employee benefit liabilities by USD 24.1 million to USD 24.7 million. Lower pension liabilities are mainly driven by USD 19.5 million of plan asset gains, reflecting a favorable performance of pension fund investments and a USD 13.0 million favorable impact from a change of the discount rate for future liabilities from 0.1% to 0.35%. This reduction of liabilities is booked as other comprehensive income and had no impact on the Group's profit and loss statements.

Total current liabilities increased by USD 201.3 million to USD 518.6 million, with short-term financial debt increasing by USD 191.8 million to USD 240.0 million, mainly driven by the reclassification of the 2022 bond. In addition, a lower utilization of credit lines resulted in a net USD 10.4 million short-term debt reduction. Overall, the Group's primary interest-bearing liabilities include the CHF 200 million bond with a 1.875% interest rate maturing in August 2022 and the CHF 150 million bond with a 1.5% interest rate maturing in September 2024. In 2021, the Group repurchased USD 16.8 million nominal amount of the 2022 bond and USD 2.5 million of the 2024 bond.

Over the last two years, the Group significantly reduced its net debt and improved its leverage ratio (net financial debt / EBITDA). Group net debt declined from USD 392.1 million at the end of 2019, to USD 334.8 million in 2020 and USD 152.4 million at the end of 2021. The leverage ratio declined from 9.7x in 2019 to 5.2x in 2020 and 2.1x in 2021.

At the end of 2021, contract liabilities increased by USD 13.4 million, mainly reflecting a prepayment received from a Digital TV customer for services to be delivered and recognized as revenue in 2022.

In 2021, the Group generated USD 103.1 million of cash flow from operating activities. The aggregate operating cash flow of the last two years amounts to USD 235.7 million. Continued working capital improvements contributed to the Group's cash generation, including USD 29.2 million of cash flow from the reduction of accounts receivables and contract assets.

The Group generated USD 91.8 million from investing activities. The sale and leaseback transactions generated USD 92.8 million, net of the Nagravision minority investment in the headquarters' buildings. The sale of the former SmarDTV building generated USD 11.4 million of cash. The Group continues to limit capital expenditures, with a cash outflow of USD 6.5 million to purchase intangible fixed assets and USD 7.4 million for tangible fixed assets.

Net cash-out for financing activities amounted to USD 55.1 million, compared to USD 52.3 million in 2020. This cash outflow includes USD 14.8 million of payments for lease obligations, and the USD 6.1 million cash distribution paid to Kudelski SA shareholders in 2021. Net debt reimbursement in 2021 amounts to USD 33.1 million.

Outlook

The Digital TV segment delivered strong 2021 results, materially exceeding expectations. For 2022, the Group expects the base effect of a strong 2021 to result in revenues stable or slightly declining at single-digit rates. Operating expenditures are expected to marginally grow compared to 2021, due to investments in Digital TV growth initiatives. These developments reflect the base effect of exceptional 2021 results and will translate in a year-on-year reduction of the segment's EBITDA.

In the Cybersecurity segment, the Group expects to maintain its 2021 momentum, with revenues growing at double-digit rates. As the Cybersecurity business continues to drive the development of higher margin product lines, margin after cost of material should also grow at a double-digit rate. After the material build-up of operating expenses in 2021, OPEX growth is expected to slow down in 2022, resulting in a material improvement of segment profitability.

The strong momentum of RecovR sales is expected to drive IoT's revenues in 2022, while the Group will continue to promote IoT Services and the keySTREAM platform as a driver of long-term growth. Consistent with 2021, the Group expects IoT revenues to at least double in 2022 compared to the prior year. 2022 gross margins will decline, as the revenue mix will increasingly shift to the asset tracking business line. With operating expenses only marginally increasing compared to 2021, revenue growth is expected to translate to a lower EBITDA loss in 2022.

The Public Access business will continue to face uncertainties related to the COVID-19 impact on airports, shopping centers, stadiums and ski resorts, for at least the first half of the year. Planning for 2022 takes these uncertainties into account. The Group forecasts a partial recovery with mid-single digit revenue growth for Public Access, with a limited increase of operating expenses. In 2022, the Group expects to benefit from the streamlining of SKIDATA's operations and a tighter integration with other Group businesses, targeting a material improvement of Public Access profitability.

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KUDELSKI SA FINANCIAL STATEMENTS

CONSOLIDATED INCOME STATEMENTS

(FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020)

In USD'000	Notes	2021	2020
Revenues	4	753 932	729 492
Other operating income	5	24 900	12 057
Total revenues and other operating income		**778 832**	**741 549**
Cost of material, licenses and services		-224 776	-211 675
Employee benefits expense	6	-386 152	-368 132
Other operating expenses	7	-95 547	-97 417
Operating income before depreciation, amortization and impairment		**72 356**	**64 325**
Depreciation, amortization and impairment	8	-42 128	-48 271
Operating income		**30 228**	**16 055**
Interest expense	9	-9 774	-10 397
Other finance income/(expense), net	10	2 107	-14 808
Share of result of associates	16	2 111	1 894
Income before tax		**24 672**	**-7 256**
Income tax expense	11	-3 222	-10 732
Net income for the period from continuing operations		**21 451**	**-17 989**
Net result from discontinued operations	36	-1 089	–
Net income for the period		**20 362**	**-17 989**
Attributable to:			
- Equity holders of the company		*14 592*	*-23 202*
- Non-controlling interests		*5 770*	*5 213*

Earnings per share (in USD)			
Attributable to shareholders of Kudelski SA for bearer shares : basic and diluted (in USD)	12	0.2637	-0.4220
- Continuing operations		*0.2834*	*-0.4220*
- Discontinued operations		*-0.0197*	*-*
Attributable to shareholders of Kudelski SA for registered shares : basic and diluted (in USD)	12	0.0264	-0.0422
- Continuing operations		*0.0284*	*-0.0422*
- Discontinued operations		*-0.0020*	*-*

The accompanying notes form an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020)

In USD'000	2021	2020
Net income	**20 362**	**-17 989**
Other comprehensive income to be eventually reclassified into the consolidated income statement in subsequent periods:		
Currency translation differences	-7 675	-2 725
Cash flow hedges, net of income tax	151	–
	-7 524	**-2 725**
Other comprehensive income never to be reclassified into the consolidated income statement in subsequent periods:		
Change in fair value of equity investments at fair value through other comprehensive income	–	315
Remeasurements on post employment benefit obligations, net of income tax	21 156	753
	21 156	**1 068**
Total other comprehensive income, net of tax	**13 631**	**-1 657**
Total comprehensive income	**33 993**	**-19 646**
Attributable to:		
Shareholders of Kudelski SA	28 168	-24 963
- Continuing operations	*28 168*	*-24 963*
- Discontinued operations	-	-
Non-controlling interests	5 825	5 317

The accompanying notes form an integral part of the consolidated financial statements.

CONSOLIDATED BALANCE SHEETS
(AT DECEMBER 31, 2021 AND 2020)

In USD'000	Notes	31.12.2021	31.12.2020
ASSETS			
Non-current assets			
Tangible fixed assets	13	73 940	127 704
Intangible assets	14	380 607	399 358
Right-of-use assets	15	50 746	41 639
Investments in associates	16	9 335	7 007
Deferred income tax assets	17	44 054	50 858
Financial assets at amortized cost	18	31 792	40 817
Financial assets at fair value through profit and loss	18	1 152	2 182
Other non-current assets	18	896	863
Total non-current assets		**592 523**	**670 427**
Current assets			
Inventories	19	54 378	59 197
Trade accounts receivable	20	163 514	184 476
Contract assets	20	36 733	44 582
Other financial assets at amortized cost	21	49 655	54 503
Other current assets	22	43 450	38 549
Derivative financial instruments	34	699	–
Cash and cash equivalents	23	284 489	152 584
Total current assets		**632 918**	**533 892**
Assets classified as held for sale	**36**	**–**	**12 777**
Total assets		**1 225 441**	**1 217 096**
EQUITY AND LIABILITIES			
Equity			
Share capital	24	340 484	337 295
Reserves		21 145	1 156
Equity attributable to equity holders of the parent		**361 629**	**338 451**
Non-controlling interests	25	35 033	30 580
Total equity		**396 662**	**369 031**
Non-current liabilities			
Long-term financial debt	26	196 870	439 192
Long-term lease obligations	15	76 504	29 599
Deferred income tax liabilities	17	2 050	3 195
Employee benefits liabilities	28	24 715	48 817
Other long-term liabilities	29	10 070	9 979
Total non-current liabilities		**310 209**	**530 781**
Current liabilities			
Short-term financial debt	30	240 023	48 212
Short-term lease obligations	15	15 114	13 720
Trade accounts payable	31	68 586	67 732
Contract liabilities	32	83 298	69 873
Other current liabilities	33	105 718	109 521
Current income taxes		2 684	4 383
Derivative financial instruments	34	82	–
Provisions for other liabilities and charges	35	3 065	3 842
Total current liabilities		**518 569**	**317 283**
Total liabilities		**828 778**	**848 064**
Total equity and liabilities		**1 225 441**	**1 217 096**

The accompanying notes form an integral part of the consolidated financial statements.

CONSOLIDATED CASH FLOW STATEMENTS

(FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020)

In USD'000	Notes	2021	2020
Net income for the year		**20 362**	**-17 989**
Adjustments for net income non-cash items:			
- Current and deferred income tax		3 222	10 732
- Interests, allocation of transaction costs and foreign exchange differences		6 311	22 298
- Depreciation, amortization and impairment	8	42 128	48 271
- Share of result of associates	16	-2 111	-1 894
- Non-cash employee benefits (income) / expense		3 287	-4 832
- Deferred cost allocated to income statement		187	223
- Additional provisions net of unused amounts reversed		323	-747
- Non-cash government grant income		-4 265	-5 883
- Other non-cash (income) / expenses		-11 600	-7 204
Adjustments for items for which cash effects are investing or financing cash flows:			
- Other non-operating cash items		-12 843	-263
Adjustments for change in working capital:			
- Change in inventories		5 193	11 402
- Change in trade accounts receivable		29 198	64 827
- Change in trade accounts payable		-836	5 747
- Change in accrued expenses		-1 227	5 579
- Change in deferred costs and other net current working capital headings		18 341	4 807
Government grant from previous periods received		16 309	11 873
Dividends received from associated companies	16	1 911	398
Interest paid		-8 938	-9 259
Interest received		698	335
Income tax paid		-2 525	-5 834
Cash flow from operating activities		**103 127**	**132 588**
Purchases of intangible fixed assets		-6 474	-3 965
Purchases of tangible fixed assets		-7 417	-6 694
Proceeds from sales of tangible and intangible fixed assets		98 004	524
Proceeds from sale of investment property		11 352	–
Divestment of financial assets and loan reimbursement		1 306	1 575
Payment arising from prior years business combinations		–	-344
Acquisition of associated companies		-4 922	–
Cash flow from investing activities		**91 849**	**-8 903**
Reimbursement of bank overdrafts, long-term loans and other non-current liabilities		-75 661	-84 973
Increase in bank overdrafts, long-term loans and other non-current liabilities		42 591	65 103
Payments of lease liabilities		-14 756	-16 699
Proceeds from employee share purchase program	39	122	102
Acquisition of non-controlling interests		-355	–
Proceed from a partial sale of subsidiary not resulting in a loss of control		–	113
Dividends paid to non-controlling interests		-963	-10 224
Dividends paid to shareholders	38	-6 080	-5 692
Cash flow from financing activities		**-55 102**	**-52 270**
Effect of foreign exchange rate changes on cash and cash equivalents		-7 969	6 573
Net movement in cash and cash equivalents		**131 905**	**77 988**
Cash and cash equivalents at the beginning of the year	23	152 584	74 596
Cash and cash equivalents at the end of the year	23	284 489	152 584
Net movement in cash and cash equivalents		**131 905**	**77 988**

The accompanying notes form an integral part of the consolidated financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020)

In USD'000	Notes	Share capital	Share premium	Retained earnings	Fair value and other reserves	Currency translation adjustment	Non-controlling interests	Total equity
January 1, 2020		**335 101**	**73 737**	**-41 839**	**-2 998**	**2 380**	**37 037**	**403 418**
Net income		–	–	-23 202	–	–	5 213	-17 989
Other comprehensive income		–	–	753	315	-2 829	104	-1 657
Total comprehensive income		**–**	**–**	**-22 449**	**315**	**-2 829**	**5 317**	**-19 646**
Employee share purchase program	39	438	-292	–	–	–	–	146
Shares issued to employees	39	1 756	-841	–	–	–	–	915
Dividends paid to shareholders		–	-2 846	-2 846	–	–		-5 692
Dividends paid to non-controlling interests		–	–	–	–	–	-10 224	-10 224
Transactions with non-controlling interests		–	–	1 664	–	–	-1 550	113
December 31, 2020		**337 295**	**69 758**	**-65 470**	**-2 683**	**-449**	**30 580**	**369 031**
Net income		–	–	14 592	–	–	5 770	20 362
Other comprehensive income		–	–	21 156	151	-7 731	56	13 631
Total comprehensive income		**–**	**–**	**35 748**	**151**	**-7 731**	**5 825**	**33 993**
Employee share purchase program	39	418	-242	–	–	–	–	176
Shares issued to employees	39	2 770	-1 911	–	–	–	–	859
Dividends paid to shareholders	38	–	-3 040	-3 040	–	–		-6 080
Dividends paid to non-controlling interests		–	–	–	–	–	-963	-963
Transactions with non-controlling interests		–	–	54	–	–	-409	-355
December 31, 2021		**340 484**	**64 565**	**-32 708**	**-2 532**	**-8 180**	**35 033**	**396 662**

Fair value and other reserves as of December 31, 2021 include kUSD -2 532 (2020: kUSD -2 683) of unrealized loss on financial assets at fair value through other comprehensive income.

The accompanying notes form an integral part of the consolidated financial statements.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2021

1. SIGNIFICANT ACCOUNTING POLICIES

(A) Basis of preparation

The consolidated financial statements of the Kudelski Group (Group or Company) have been prepared in accordance with International Financial Reporting Standards (IFRS) and interpretations issued by the IFRS Interpretations Committee (IFRS IC) applicable to companies reporting under IFRS. The financial statements comply with IFRS as issued by the International Accounting Standards Board (IASB).

The preparation of the financial statements in conformity with IFRS requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying accounting policies. The areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements, are disclosed in note 2.

These consolidated financial statements were prepared under the historical cost convention, except for items to be measured at fair value as explained in the accounting policies below. The policies set out below are consistently applied to all years presented. Prior year figures have been reclassified where necessary to better enable comparison. Due to rounding, numbers presented throughout this report may not add up precisely to the totals provided.

(B) Group accounting

(a) Subsidiaries

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect these returns through its power over the entity. Subsidiaries also comprise companies in which the Group does not own, directly or indirectly, more than one half of the voting rights but exercises power to govern their financial and operating policies and bears an over-proportional responsibility for the main risks. Subsidiaries are fully consolidated from the date on which control is transferred to the Group.

Intercompany transactions, balances, income and expenses on transactions between Group companies are eliminated. Profits and losses resulting from intercompany transactions that are recognised in assets are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

(b) Business combinations

The Group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary consists of the fair values of the assets transferred, the liabilities assumed by the former owners of the acquiree and the equity interest issued by the Group. Acquisition-related costs are expensed as incurred. The consideration transferred includes the fair value of any asset or liability resulting from any contingent consideration.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair value at the acquisition date, irrespective of the extent of any non-controlling interests. Identified assets acquired include fair value adjustments on tangible and intangible assets. When determining the purchase price allocation, the Group primarily considers development technologies, customer lists, trademarks and brands as intangibles.

Any contingent consideration which depends on the future financial performance of the acquired company (“earn out clause”) is recognized at fair value on the acquisition date using management’s best estimate of the final consideration payable. The portion of the contingent consideration deferred to a date more than twelve months after the balance sheet date is discounted to its present value and disclosed within other long-term liabilities.

The Group recognizes non-controlling interests as its proportionate share of the recognized amounts of identifiable net assets. Goodwill is initially measured as the excess of the aggregate value of the consideration transferred plus the fair value of non-controlling interests over the net identifiable assets acquired and liabilities assumed. Transactions with non-controlling interests are accounted for as transactions with equity owners of the Group. The difference between the fair value of any consideration paid and the relevant acquired share of the carrying value of net assets of the subsidiary is recorded in equity. Gains or losses on disposals to non-controlling interests are also recorded in equity.

(c) Disposal of subsidiaries

When the Group ceases to have control over a subsidiary, any retained interest in the entity is re-measured to its fair value at the date when control is lost, with the change in carrying amount recognized in the income statement. In addition, any amounts previously recognized in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognized in other comprehensive income are reclassified to profit or loss.

d) Associates

Associates are entities over which the Group has significant influence but which are not subsidiaries. Significant influence is the power to participate in the financial and operating policy decisions of the associate but not the control of those policies. Significant influence is presumed to exist when the Group holds at least 20% of the associate's voting power. Investments in associates are accounted for using the equity method of accounting and are initially recognized at cost. Unrealized gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in the associates. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred.

Accounting policies of associates have been changed where necessary to ensure consistency with the policies adopted by the Group.

(C) Foreign currencies

The consolidated financial statements of the Group are expressed in U.S. Dollars (USD), which is the presentation currency.

The local currency is generally the functional currency throughout the world. In the respective entity financial statements, monetary assets and liabilities denominated in currencies other than the functional currency are translated at the rate prevailing at the balance sheet date. Transactions contracted in a currency other than the functional currency are recorded using the exchange rate at the time of the transaction. All resulting foreign exchange transaction gains and losses are recognized in the subsidiary's income statement.

Income, expense and cash flows of the consolidated companies have been translated into U.S. dollars using average exchange rates. Assets and liabilities are translated at the closing rate at the date of the balance sheet. All resulting translation differences, including those arising from the translation of any net investment in foreign entities, are recognized in other comprehensive income. The loss of control or total disposal of a subsidiary results in the reclassification of any translation difference to the income statement.

(D) Revenue recognition

Revenue is measured based on the consideration specified in a contract with a customer, and is shown net of value added tax, returns, rebates, discounts, commissions directly attributed to the sale, and after eliminating sales within the Group. The Group recognizes revenue when it satisfies a performance obligation by transferring control of a product or service to a customer.

The Group sells hardware and software products on both a stand-alone basis without any services and as solutions bundled with services.

Generally, when we provide a combination of hardware and software products with the provision of services, we separately identify our performance obligations under the contract as distinct goods and services that will be provided. The total transaction price for an arrangement with multiple performance obligations is allocated at contract inception to each distinct performance obligation in proportion to its stand-alone selling price. The stand-alone selling price is the price at which we would sell a promised good or service separately to a customer. Observable stand-alone selling prices are used when readily available. If not available, we estimate the price based on observable inputs, including direct labor hours and allocable costs.

(a) Hardware

Revenue from hardware sales is recognized when control of the products has transferred, being when the products are delivered to the customer and there is no unfulfilled obligation that could affect the customer's acceptance of the products. Delivery occurs when the products have been shipped to a specified location, the risks of obsolescence and loss have been transferred to the customer, and either the customer has accepted the products in accordance with the agreement, the acceptance provisions have lapsed, or the Group has objective evidence that all the criteria for acceptance have been satisfied. In certain instances, we leverage drop-shipment arrangements with our partners and suppliers to deliver products to our clients without having to physically hold the inventory at our warehouses. We recognize revenue for drop-shipment arrangements on a gross basis as the principal in the transaction when the product is received by the customer because we control the product prior to transfer to the customer. We also assume primary responsibility for fulfillment in the arrangement, we assume inventory risk if the product is returned, we set the price charged to the customer and we work closely with our customers to determine their hardware needs.

(b) Software, licenses and royalties

Revenue from software sales is recognized at the point in time when the customer acquires the right to use the soft-

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ware under license and control transfers to the customer. Revenue from licensing arrangements is recognized upon commencement of the term of the license agreement or when the renewal term begins, as applicable. Royalty revenue is recognized upon sale or usage of the product to which the royalty relates.

(c) Services

We design, implement and manage security and access solutions that combine hardware, software and services for our customers. Such services rendered may include system integrations, specific developments and customization, maintenance and training, and may be provided by us or by third-parties as part of bundled arrangements or on a stand-alone basis as consulting or managed service engagements.

If the services are provided as part of a bundled arrangement with hardware and software, the hardware, software and services are generally distinct performance obligations. In general, revenue from service engagements is recognized over time as we perform the underlying services by measuring progress toward complete satisfaction of the performance obligation. In contracts that contain a fixed fee per user, revenue is recognized in the amount in which we have the right to invoice the customer for services performed.
Specific revenue recognition practices for certain of our service offerings are described in further detail below.

(i) **Time and materials service contracts**. Revenue for service engagements that are on a time and materials basis is recognized based upon the hours incurred for the performance completed to date for which we have the right to consideration, even if such amounts have not yet been invoiced as of period end.

(ii) **Fixed fee service contracts**. Revenue from fixed fee service contracts is recognized using a proportional performance method based on the ratio of direct labor hours and other allocated costs incurred to total estimated direct labor hours and other allocated costs.

Certain software maintenance agreements provide our customers the right to obtain software upgrades, help desk and other support services directly from the third-party software provider during the term of the agreement. We act as the selling agent in these arrangements and do not assume any performance obligation to the customer under the arrangement. As a result, we are the agent in these transactions and these sales are recorded on a net sales recognition basis. Under net sales recognition, the cost of the service is recorded as a reduction to sales, resulting in net sales equal to the gross profit on the transaction.

(d) Significant financing components

Certain contracts with our customers may include payment terms that exceed one year. To the extent that a significant financing component exists in these arrangements, we record interest income associated with the financing component of the arrangement over the associated payment terms based on the prevailing market interest rate at the date of the transaction.

(e) Variable consideration

For contracts that contain variable pricing elements, the variable consideration is estimated at contract inception and constrained until the associated uncertainty is subsequently resolved. The application of the constraint on variable consideration generally increases the amount of revenue that will be deferred. Variable consideration is reviewed at each reporting period and is measured using the most likely amount method which includes management appropriate estimates.

(f) Interest income

Interest income is recognized according to the effective interest rate method.

(E) Government grants

Grants from governments or similar organizations are recognized at their fair value when there is a reasonable assurance that the Group complies with all conditions associated with their grants receipt and use. Where a government grant is subject to audit before payment, the fair value is determined using management's best estimate of the audit risk. Grants are recognized in the income statement as operating income unless they are linked to a capitalized fixed asset, in which case they are deducted from the cost of the fixed asset.

(F) Cost of material, licenses and services

The cost of material, licenses and services includes direct costs which are attributable to selected revenues. The cost of material includes only the cost of materials paid to external suppliers in connection with recognized sales transactions. It therefore does not include other direct and indirect costs associated with the manufacturing process, such as labor costs, utilities or depreciation of manufacturing assets.

Cost of licenses includes amounts charged by external suppliers for sublicenses on a per-unit basis for each unit of delivered product (e.g. CODEC licenses charged on each set-top-box sold). It therefore specifically excludes licenses paid independently of the number of units sold, deployed or used in a development process.

Cost of services includes outsourced services that are directly connected to a recognized sales transaction, such as subcontracting a portion of a maintenance agreement or outsourcing the implementation of a revenue-generating customer solution.

(G) Derivative financial instruments

Derivative financial instruments are initially recognized at fair value on the date a derivative contract is entered in to and subsequently remeasured to fair value at the end of each reporting period. The method of recognizing the resulting gain or loss is dependent on whether the derivative is designated to hedge a specific risk and therefore qualifies for hedge accounting.

The currency instruments that are generally used include forward foreign exchange contracts, currency swaps and zero cost option strategies with terms generally not exceeding one year. Derivative financial instruments are entered into with high credit quality financial institutions, consistently following specific approval, limit and monitoring procedures.

(a) Derivatives that do not qualify for hedge accounting

Certain derivatives transactions, while providing effective economic hedging under the Group's risk management policy, do not qualify for hedge accounting under the specific rules of IFRS 9. Changes in the fair value of derivative instruments that do not qualify for hedge accounting under IFRS 9 are recognized immediately in the income statement as part of 'other finance income/(expense), net'.

(b) Cash flow hedge

The Group designates the derivatives which qualify as hedges of a forecast transaction (cash flow hedge). The Group documents at the inception of the hedging transaction the relationship between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. The Group also documents its assessment, both at hedge inception and on an ongoing basis, of whether the economic relationship exists between the hedged item and the hedging instrument. The Group enters into hedging instruments that have similar critical terms as the hedged items, such as reference rates, notional amounts and maturities.

Changes in intrinsic value of derivative financial instruments that meet hedge qualifying criteria are recognized in the 'cash flow hedge reserve' within equity. Changes in fair value of derivative instruments attributable to time value are recognized in the 'cost of hedging reserve' within equity. The amounts accumulated in hedging reserves of OCI are reclassified to profit or loss in the same period during which the hedged expected future cash flow affects the income statement.

In hedges of highly probable future sales transactions, ineffectiveness may arise if the timing of the forecast transaction changes from what was originally estimated or if there are any changes in the credit risk of the derivative counterparty.

When a cash flow hedge no longer meets the criteria for hedge accounting, the gains and losses that were previously recorded in equity remain deferred in equity until the hedged cash flow is recognized in the income statement. When the forecast transaction is no longer expected to occur, the cumulative gain or loss and deferred cost of hedging are immediately reclassified to the income statement. Gain or loss, as well as cost of hedging, related to the ineffective portion is recognized in the income statement within 'other finance income/(expense), net'.

(H) Taxes

Taxes reported in the consolidated income statements include current and deferred taxes on profit, as well as non-reimbursable withholding taxes and tax adjustments relating to prior years. Income tax is recognized in the income statement, except to the extent that it relates to items directly taken either to equity or to other comprehensive income, in which case it is recognized either in equity or in other comprehensive income. Taxes on income are accrued in the same periods as the revenues and expenses to which they relate.

Deferred taxation is the tax attributable to the temporary differences that appear when taxation authorities recognize and measure assets and liabilities with rules that differ from those of the consolidated accounts. Deferred taxes are determined using the comprehensive liability method and are calculated on the temporary differences at the substatively enacted rates of tax expected to prevail when the temporary differences reverse, except for those temporary differences related to investments in subsidiaries where the timing of their reversal can be controlled and it is probable that the difference will not reverse in the foreseeable future.

Temporary differences and tax losses carried forward are recognized only to the extent that it is probable that future taxable income will be available against which they can be utilized. Temporary

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differences and tax losses which generate deferred tax assets and liabilities based on their future probable use are combined within each legal entity to provide a net deferred tax asset or liability amount. Deferred income tax liabilities have not been recognized for withholding tax and other taxes that would be payable on the unremitted earnings of certain subsidiaries. Such amounts are either permanently reinvested or do not generate any taxation due to the application of tax treaties or tax reliefs.

(I) Tangible fixed assets

(a) General

Property, plant and equipment is measured at cost, less subsequent depreciation and impairment, except for land, which is shown at cost less impairment. Cost includes any expenditure that is directly attributable to the acquisition of the items. Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group, and the cost of the item can be measured reliably. All other repair and maintenance expenditures are charged to the income statement during the financial period in which they are incurred.

Building acquisitions or construction and building improvements are allocated to components. The costs less residual values are depreciated over their useful lives on a straight-line basis. Such useful lives may be between 4 to 50 years. Depreciation starts when the underlying assets are ready for use.
Depreciation is calculated on a straight-line basis over each asset's useful life, according to the following schedule:

Technical equipment and machinery

	Useful life in years
Machinery and measurement instruments	4 - 7
Digital material and equipment	4 - 5
Computer and information networks	4
Fixed assets made available to clients	4 - 10

Other equipment

	Useful life in years
Office furniture and equipment	5 - 7
Vehicles	4 - 5

Each assets' residual values and useful lives are reviewed, and adjusted if appropriate, at each balance sheet date. An asset's carrying amount is impaired immediately if the asset's carrying amount is greater than its estimated recoverable amount. Gains and losses on disposal or retirement of tangible fixed assets are determined by comparing the proceeds received with the carrying amounts, and are included in the consolidated income statements.

(b) Fixed assets made available to clients

The Group makes equipment as well as smart cards available to clients within the scope of complete security solutions. The assets given to these clients remain the property of the Group and are initially recognized at cost and disclosed in the balance sheet under technical equipment and machinery. These assets are depreciated over the shorter of the duration of the contract and the economic life of the individual components, and the related expense is disclosed under depreciation.

(c) Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production assets which take a substantial period of time to be ready for their intended use of sale, are added to the cost of those assets, until such time as the assets are substantially ready for their intended use or sale.
All other borrowing costs are recognised in the income statement in the period in which they are incurred.

(J) Intangible assets

(a) Goodwill

Goodwill arises from the acquisition of subsidiaries and represents the excess of the consideration transferred over the Group's interest in the fair value of the net identifiable assets, liabilities and contingent liabilities of the acquiree and the fair value of the non-controlling interest in the acquiree at the date of acquisition. It is denominated in the functional currency of the related acquisition. Goodwill on acquisition of subsidiaries is included in intangible assets, while goodwill on acquisition of associates is included in investments in associates. All goodwill is considered to have an indefinite life, tested at least annually for impairment, and carried at cost less accumulated impairment losses. Goodwill is allocated to cash-generating units for the purpose of impairment testing.
Gains and losses on the disposal of an entity include the carrying amount of goodwill associated with the entity sold.

(b) Internal research and development

Internal research and development expenses are fully charged to the income statement when incurred. The Group considers that economic uncertainties inherent in the development of new products preclude it from capitalizing such costs.

(c) External research and development

Expenditures with external parties for research and development, application software and technology contracts are charged to the income statement as incurred if they do not qualify for capitalization. When capitalized, they are amortized over 4 to 10 years once development is achieved and the resulting products are ready for sale.

(d) Computer software

Acquired computer software licenses are capitalized in the amount expended to acquire the software and get ready it for its intended use. These costs are amortized on a straight-line basis over their estimated useful lives (three to four years). Costs associated with maintaining computer software programs are recognized as expense as incurred.

(e) Customer lists, Trademarks and Brands

Customer lists, trademarks and brands not acquired through a business combination are initially measured at cost. Following initial recognition, they are carried at cost less any accumulated amortisation and impairment losses, and are amortised over their useful economic life. Internally generated customer lists, trademarks and brands are not capitalised.

(f) Other intangibles in connection with business combinations

Under IFRS 3, in-process research and development, core development technologies, customer lists and trademarks are valued as part of the process of allocating the purchase price in a new business combination. The respective values are recorded separately from goodwill and are allocated to cash-generating units. Acquired intangibles are amortized on a straight-line basis over the following periods, with the expense recorded in the income statement:

	Over the useful life, in years
Core development technologies	4 - 10
Customer lists	10
Trademarks and brands	5

(K) Leases

The Group leases various properties, equipment and vehicles. Rental contracts typically cover fixed periods between one and 15 years and may contain extension options as described below. Lease terms are negotiated on an individual basis and include a wide variety of different terms and conditions. The lease agreements generally do not impose financial covenants, however, leased assets are not allowed to be used as collateral for borrowing purposes.

Leases are booked as a right-of-use asset and as a corresponding lease liability at the date at which the leased asset is available for use by the Group. Each lease payment is apportioned between the reduction of the outstanding lease liability and finance cost. The finance cost is charged to profit or loss over the lease period to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life or the lease term on a straight-line basis. Assets and liabilties arising from a lease are initially measured on a present value basis. Lease liabilities are valued at the net present value of the future lease payments, which includes fixed lease payments, variable lease payments based on indexes and rates, residual value guarantees, purchase options and termination penalties. Lease payments are discounted using the interest rate implicit in the lease, or if that rate cannot be determined, the Group's incremental borrowing rate based on the currency in which it finances its local operations.

Right-of-use assets are measured at cost, comprising the amount of the initial lease liability adjusted by any lease payments made at or before the commencement date of the lease, any lease incentives received, initial direct costs and any estimated restoration costs.

Payments associated with short-term leases and leases of low-value assets are recognized on a straight-line basis as an expense in profit or loss. Short-term leases are identified as leases with a term of 12 months or less. Low-value assets comprise general office furniture and IT equipment .

Extension and termination options are included in a number of property and equipment leases throughout the Group. These terms are used to maximize operational flexibility, with the majority of extension and terminations options being exercisable only by the Group and not by the respective lessor.

(K) Financial assets

(a) Classification

The Group classifies its financial instruments in the following categories: financial assets or financial liabilities measured at fair value (either through other comprehensive income (OCI), or through profit or loss), and financial assets or financial liabilities measured at amortized cost. The classification depends on the Group's business model for managing the financial assets and liabilities and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses will either be recorded in profit or loss, or OCI. For investments in equity instruments that are not held for trading, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity instrument at fair value through OCI.

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(b) Measurement
At initial recognition, the Group measures financial assets and liabilities at fair value plus or minus any transaction costs that are directly attributable to the acquisition of the instrument. For financial assets that are carried at fair value through profit or loss, transaction costs are expensed as incurred.

Subsequent measurement of loans and debt instruments depends on the Group's business model for managing the financial instrument and the cash flow characteristics of the asset or liability. The Group classifies its debt instruments into three measurement categories, amortized cost, fair value through profit or loss, or fair value through OCI.

Assets that are held for collection of contractual cash flows where those cash flows represent solely payments of principal and interest are measured at amortized cost. Interest income from these assets is included in 'other finance income/(expense), net' using the effective interest rate method. Any gain or loss arising on derecognition is recognized in profit or loss and presented in 'other operating expenses'. Foreign exchange gains and losses are presented in 'other finance income/(expense), net'.

Assets that are held for collection of contractual cash flows and for selling the financing assets, where the assets' cash flows represent solely payments of principal and interest, are measured at fair value through OCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest revenue and foreign exchange gains and losses, which are recognized in profit or loss. When the financing asset is derecognized, the cumulative gain or loss previously recognized in OCI is reclassified from equity to profit or loss and recognized in 'other finance income/(expense), net'. Interest income from these financial assets is included in 'finance income' using the effective interest rate method. Foreign exchange gains or losses are presented in 'other finance income/(expense), net'.

Assets that do not meet the criteria for amortized cost or fair value through OCI are measured at fair value through profit or loss and presented as 'other finance income/(expense), net' in the period in which it arises.

The Group subsequently measures all equity investments at fair value. Where the Group has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognized in profit or loss as 'other finance income/(expense), net' when the right to receive payments is established.

Changes in the fair value of financial assets at fair value through profit or loss are recognized in 'other finance income/(expense), net' in the statement of profit or loss as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at fair value through OCI are not reported separately from other changes in value.

(c) Impairment
The Group assesses on a forward-looking basis the expected credit losses associated with its financial assets carried at amortized cost and fair value through OCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

The Group applies a simplified approach permitted by IFRS 9 for trade accounts receivables and contract assets, which requires expected lifetime credit losses to be recognized from initial recognition of the receivables.

To measure expected credit losses, trade receivables and contract assets are grouped based on shared credit characteristics and days past due. The Group therefore concludes that the expected loss rates for trade accounts receivables are a reasonable approximation of the loss rates for contract assets.

Expected loss rates are based on the payment profiles of sales over the 36 month period preceding the financial statement reporting date and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information affecting the ability of the customers to settle the receivables.

(L) Inventories
Inventories are stated at the lower of cost and net realizable value. Cost is determined using the weighted average cost method.
The cost of work in progress and manufactured finished goods is comprised of direct production costs and an appropriate proportion of production overhead and factory depreciation. Net realizable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses. Inventories which are no longer part of production and sales plans are charged to profit or loss.

(M) Deferred costs
Deferred costs are measured at cost and are allocated to the income statement over the shorter of their useful life

and the contract period. The portion of deferred cost to be expensed in the income statement during a period that exceeds 12 months from the balance sheet date is disclosed under other non-current assets.

(N) Trade accounts receivable

Trade accounts receivable are initially measured at fair value and subsequently valued using the amortized cost method.

(O) Contract assets

A contract asset is the entity's right to consideration in exchange for goods or services that the entity has transferred to the customer. A contract asset becomes a receivable when the entity's right to consideration is unconditional, which is the case when only the passage of time is required before payment of the consideration is due. Contract assets relate to unbilled work in progress and have substantially the same risk characteristics as trade receivables.

(P) Cash and cash equivalents

Cash and cash equivalents include cash in hand and highly liquid investments with original maturities of three months or less which are readily convertible to known amounts of cash. Bank overdrafts are included in short-term financial debt in current liabilities on the balance sheet.

(Q) Share capital

Ordinary and preferred shares of Kudelski SA are classified as equity and are presented at their nominal value. The difference between proceeds of share capital less directly attributable incremental costs and the nominal value of the share capital increase are considered as share premium and included in equity.

(R) Borrowings

Borrowings are initially recognized at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortized cost. Any difference between the net proceeds and the redemption value is recognized in the income statement over the period of the borrowings using the effective interest method.

Fees paid for the establishment of loan facilities are recognized as transaction costs of the loan if all of the facility will be drawn down. If there is no evidence that all of the facility will be drawn down, the fee is capitalized as a pre-payment for liquidity services and amortized over the period of the loan facility.

Where borrowings are made available through COVID-19 relief packages with interest rates below market, the Group recognizes a portion of the proceeds as a government grant. The grants are initially deferred and recognized in earnings on a systematic basis over the term of the loan as 'Other operating income'.

(S) Provisions

Provisions are recognized when the Group has a present legal or constructive obligation as a result of past events, it is more likely than not that an outflow of resources will be required to settle the obligation, and the amount can be reliably estimated. Provisions are not recognized for future operating losses. Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognized even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

A restructuring provision is recognized when the Group has developed a formal plan for the restructuring and has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement the plan or announcing its main features to those affected. Restructuring provisions comprise employee termination payments, lease termination penalties and dilapidation costs.

(T) Employee benefits

(a) Pension obligations

The Group operates a number of defined benefit and defined contribution plans, the assets of which are generally held in separate trustee-administered funds. The pension plans are generally funded by payments from employees and by their employer, taking into consideration the recommendations of independent qualified actuaries. For defined benefit plans, the Group companies provide for benefits payable to their employees on retirement by charging current service costs to income.

The liability for defined benefit pension plans is the present value of the defined benefit obligation at the balance sheet date minus the fair value of plan assets, together with adjustments for actuarial gains/losses and past service costs. Defined benefit obligations are in all material cases calculated annually by independent actuaries using the projected unit credit method, which reflects services rendered by employees to the date of valuation, incorporates assumptions concerning employees' projected salaries and uses interest rates of highly liquid corporate bonds which have terms to maturity approximating the terms of the related liability. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are charged or credited to equity in other comprehen-

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sive income in the period in which they arise.

The Group's contributions to the defined contribution plans are charged to the income statement in the year during which they are made.

(b) Other long-term employee benefits
Other long-term employee benefits represent amounts due to employees under deferred compensation arrangements mandated by certain jurisdictions in which the Group conducts its operations. The cost of such deferred compensation arrangements is recognized on an accrual basis and included within employee benefits expense.

(c) Employee Share Purchase Program (ESPP)
The Group's employee share purchase program allows certain employees to buy a specific number of shares on a preferential basis, subject to certain restrictions on the sales of the shares for a period of 3 years.The difference between the fair value of these shares and the employee' payments for the shares is expensed in the income statement on the subscription date. The fair value of the shares transferred is determined based on the market price of the shares adjusted for the estimated value of the restrictions on sales.

(d) Profit sharing and bonus plan
The Group recognizes a liability and an expense for bonuses and profit sharing where contractually obliged or where there is a past practice that has created a constructive obligation. In addition, the Board of Directors may grant shares to certain employees. These shares may be subject to a blocking period of up to 7 years and are expensed in the income statement at their fair value at grant date taking into account the estimated value reduction due to the blocking period.

(e) Other employee benefits
Salaries, wages, social contributions and other benefits are recognized on an accrual basis in employee benefits expense in the year in which the employees render the associated services.

(U) Trade accounts payable
Trade payables are recognized initially at fair value and subsequently measured at amortised cost using the effective interest method.

(V) Contract liabilities
Contract liabilities represent the Group's current obligation to transfer goods or services to a customer for which the Group has received consideration from the customer. Contract liabilities primarily relate to billed work in progress and service contracts, whereby the customer has been invoiced in advance of the services being performed and are generally recognized within twelve months.

(W) Dividends
Dividends are recorded in the Group's financial statements in the period in which they are approved by the Group's shareholders.

(X) Non-current assets held for sale
Non-current assets and disposal groups are classified as held for sale if their carrying value will be recovered principally through a sale transaction rather than through continuing use. The Group considers this condition to be met when management is committed to a sale and a sale is highly probable of being completed within one year from the date of classification.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their carrying value or fair value less costs to sell.

(Y) New and amended accounting standards and IFRIC interpretations
Standards and Interpretations effective in the current period and change in accounting policies
The accounting policies adopted are consistent with those followed in the preparation of the Group's annual financial statements for the year ended December 31, 2020.

The Group has applied the following amendments and interpretations effective from January 1, 2021:
- Covid-19-Related Rent Concessions - amendments to IFRS 16, and
- Interest Rate Benchmark Reform - amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16.

The adoption of the amendments listed above had no significant impact on the Group's accounting policies, financial position and performance. The Group has not early adopted any other standard, interpretation or amendment that has been issued but is not yet effective.

Standard and Interpretations in issue not yet adopted
Certain new standards, amendments and interpretations to existing standards have been published that are mandatory for the Group's accounting periods beginning after January 1, 2022 or later periods, and which the Group has not early adopted. These standards are not expected to have a material impact on the Group in the current or future reporting periods and on foreseeable future transactions.

2. CRITICAL ACCOUNTING ESTIMATES AND JUDGMENTS

The Group's principal accounting policies are set out in note 1 of the Group's consolidated financial statements and conform to International Financial Reporting Standards.

Significant judgments and estimates are used in the preparation of the consolidated financial statements which, to the extent that actual outcomes and results may differ from these assumptions and estimates, could significantly affect the accounting in the areas described in this section.

Impairment of goodwill

Determining whether goodwill is impaired requires an estimation of the value-in-use of the cash-generating units to which goodwill has been allocated.
The value in use calculation requires management's estimate of the future cash flows expected to arise from the cash-generating unit and a suitable discount rate in order to calculate present value (note 14). Actual cash flows and values could vary significantly from the forecasted cash flows and related values derived using discounting techniques.

Income tax and deferred tax assets

The Group is subject to income tax in numerous jurisdictions. Significant judgment is required in determining the portion of tax losses carried forward which can be offset against future taxable profit (note 17). In order to assess whether there is any future benefit, forecasts are made of the future taxable profits by legal entity. Actual outcomes could vary significantly from forecasts of future profits and could therefore significantly modify the deferred tax asset and the income taxes. Furthermore, subsequent changes in tax laws, such as non-exhaustive changes in tax rates, the proportion of tax losses that could be offset with future profits or changes in forfeiting periods which occur after the accounts have been approved might affect the tax asset capitalized.

Retirement benefit plans

The Group sponsors pension and other retirement plans in various forms covering employees who meet eligibility requirements. Several statistical and other factors that attempt to anticipate future events are used in calculating the expense and liability related to these plans. The factors include both financial and demographical assumptions. Financial assumptions comprise discount rate, salary and expected pension increases, interest rate credited in savings accounts, and returns on plan assets. Demographic assumptions include employee turnover, retirement payment forms (capital vs. annuity), mortality tables and disability assumptions. Demographic assumptions are based on past experience. In addition, the Group's actuarial consultants use statistical information such as withdrawal and mortality rates for their estimates.

Assumptions used (note 28) may differ materially from actual results due to changing market and economic conditions, higher or lower withdrawal rates or longer or shorter life spans of participants, among other factors. Depending on events, such differences could have a material effect on our total equity.

3. FINANCIAL RISK MANAGEMENT

The Group's Corporate Treasury function provides services to the business, coordinates access to domestic and international financial markets, and monitors and manages the financial risks relating to the operations of the Group through exposure analyses. These risks include market risk (including currency risk, fair value interest rate risk, cash flow interest rate risk and price risk), credit risk and liquidity risk.

The Group seeks to minimize the effects of these risks by using derivative financial instruments to hedge risk exposures. The use of financial derivatives is governed by the Group's treasury policies, which provide written principles on foreign exchange risk, interest rate risk, credit risk, the use of financial derivatives and non-derivative financial instruments, and the investment of excess liquidity. Internal control procedures ensure compliance with these policies. The Group does not enter into or trade financial instruments, including derivative financial instruments, for speculative purposes. The Corporate Treasury function reports periodically to the Group's finance executive committee which monitors risks and policies implemented to mitigate risk exposures.

Market risk

The Group's activities expose it primarily to the financial risks of changes in foreign currency exchange rates and interest rates. The Group applies a natural economic hedging strategy and can enter into a variety of derivative financial instruments to manage its exposure to foreign currencies and interest rate risks, including forward foreign exchange contracts or option strategies to hedge the exchange rate risks and interest rate swaps to mitigate the risk of rising interest rates.

The Group does not enter into any financial transactions containing a risk that cannot be quantified at the time the transaction is concluded (it does not sell assets short). The Group only sells existing assets or hedges transactions and future transactions that are likely to happen. Future transaction hedges are contracted according to treasury policy

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based on a foreign exchange cash flow forecast. In the case of liquid funds, it writes options on assets it has, or on positions it wants to acquire, and for which it has the required liquidity. The Group therefore expects that any loss in value for these instruments would be generally offset by increases in the value of the hedged transactions.

(a) Foreign exchange risk

The Group conducts business in a variety of countries using a variety of foreign currencies. However, the Group prepares its consolidated financial statements in U.S. Dollars. It is therefore exposed to foreign exchange risk arising from various currency exposures, primarily with respect to the Swiss franc and the Euro. Foreign exchange risk arises from future commercial transactions, recognized assets and liabilities and net investments in foreign operations. In order to manage foreign exchange risks arising from future commercial transactions and certain assets and liabilities, the Group uses forward foreign exchange contracts and foreign currency zero cost option contracts.

The Group enters into zero cost foreign currency option contracts to manage the risk associated with highly probable sales transactions for the next 12 months within a determined portion of the exposure generated, as defined in the treasury policy. These derivatives are generally qualified as cash flow hedges.

The Group also enters into foreign exchange forward and swap contracts in order to hedge the risk attributed to changes in value of recognized assets and liabilities. The Group qualifies these derivatives as held-for-trading with gains and losses recognized through profit and loss.

Net investments in Group affiliates with a functional currency other than the U.S. Dollar are of a long-term nature: the Group does not hedge such foreign currency translation exposures.

(b) Interest rates

The Group is exposed to interest rate risk as entities in the Group borrow funds at both fixed and floating interest rates. The Group manages this risk by maintaining an appropriate mix between fixed and floating rate borrowings. Interest risk exposure is evaluated regularly to align with interest rate views and the Group's defined risk appetite, which ensure that optimal hedging strategies are applied by either neutralizing the balance sheet exposures or protecting interest expense through different interest rate cycles.

Other price risks

The Group is exposed to equity price risks arising from equity investments. Equity investments are held for strategic rather than trading purposes. The Group does not actively trade these investments.

Credit risk management

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the Group. The Group uses credit rating information supplied by independent rating agencies where available and, if not available, the Group uses other publicly available financial information and its own trading records to rate its major customers. The Group's exposure and the credit ratings of its counterparties are continuously monitored, and the aggregate value of transactions concluded is spread amongst approved counterparties. Credit exposure is controlled by counterparty limits that are reviewed and approved annually by the department in charge.

The Group does not have any significant credit risk exposure to any single counterparty or any group of counterparties having similar characteristics. The Group defines counterparties as having simlar characteristics if they are related entities. Concentration of credit risk did not exceed 10% of gross monetary assets at the end of the year, with the exception of cash balances deposited with a highly rated bank. The credit risk on liquid funds and derivative financial instruments is limited because the counterparties are banks with high credit-ratings assigned by international credit-rating agencies. The maximum amount of credit risk is the carrying amount of the financial assets.

Liquidity risk management

The Group has built an appropriate liquidity risk management framework for the management of the Group's short, medium and long-term funding and liquidity management requirements.
The Group manages liquidity risk by maintaining adequate reserves, banking facilities and reserve borrowing facilities, by continuously monitoring forecasts and actual cash flows and by matching the maturity profiles of financial assets and liabilities.

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4. OPERATING SEGMENTS

IFRS 8 requires operating segments to be identified based on internal reporting that is regularly reviewed by the chief operating decision maker. Group operating segments represent strategic business units that offer products and services for which such internal reporting is maintained. The chief operating decision maker reviews the internal segment reporting in order to allocate resources to the segments and assess their performance.

The Group reports four operating segments which are reflected in internal management reporting as follows:
- Digital TV
- Cybersecurity
- Internet of Things (IoT)
- Public Access

The Digital TV division provides end-to-end integrated solutions, including open conditional access solutions, which allow TV operators and content providers to operate a wide range of high value-added pay TV services on a secure platform, and middleware software solutions for set-top-boxes and other consumer devices, enabling an advanced end-user experience. The Digital TV operating segment also includes the Group's Intellectual Property activities as well as the development of new business initiatives such as watermarking, Insight and Sporfie.

The Cybersecurity division provides end-to-end cybersecurity solutions to a wide range of customers across multiple sectors, including advisory services, technology and resale services, managed security and custom developed proprietary solutions in domains not covered by existing commercial products.

The IoT division extends the existing Digital Television secure platform into new domains, enabling device security through identity authentication and firmware protection, data security to ensure the confidentiality, integrity and authenticity of sensitive data, and access management and active security protections to enable secure processing, local decision making and threat detection and response.

The Public Access division provides access control systems and ticketing services for ski lifts, car parks, stadiums, concert halls and other major events and is active under the SKIDATA brand.

The measure of income presented to manage segment performance is the segment operating income before depreciation, amortization and impairment. This measure is based on the same accounting policies as consolidated total except that intersegment sales are eliminated at the consolidation level. Income and expenses relating to Corporate include the costs of Group headquarters and the items of income and expense which are not directly attributable to specific divisions. These elements are reported under the 'Corporate common functions'. Reportable segment assets include total assets allocated by segment with the exclusion of intersegment balances, which are eliminated. Unallocated assets include assets managed on a centralized basis, included in the reconciliation to balance sheet assets.

In USD'000	Digital TV 2021	Public Access 2021	Cyber-security 2021	Internet of Things 2021	Total 2021
Revenues from external customers	355 075	284 142	107 295	7 419	753 932
Other operating income - operating segments	8 362	2 099	39	737	11 236
Other operating income - corporate functions	–	–	–	–	13 664
Total segment revenue and other operating income	**363 437**	**286 241**	**107 334**	**8 156**	**778 832**
Cost of materials, licenses and services	-57 664	-115 020	-50 753	-1 339	-224 776
Operating expenses	-208 504	-153 873	-74 006	-28 044	-464 427
Operating income before depreciation, amortization and impairment	**97 270**	**17 347**	**-17 424**	**-21 227**	**89 629**
Depreciation, amortization and impairment	-21 255	-17 319	-2 952	-601	-42 128
Operating income - excluding corporate common functions	**76 014**	**28**	**-20 377**	**-21 828**	**47 501**
Corporate common function expenses					-17 273
Interest expense and other finance income/(expense), net					-7 667
Share of result of associates	1 455	656	–	–	2 111
Income before tax from continuing operations					**24 672**
	31.12.2021	31.12.2021	31.12.2021	31.12.2021	31.12.2021
Total segment assets	**718 342**	**312 531**	**143 478**	**43 341**	**1 217 691**

In USD'000	Digital TV 2020	Public Access 2020	Cyber-security 2020	Internet of Things 2020	Total 2020
Revenues from external customers	345 416	295 099	85 275	3 703	729 492
Other operating income - operating segments	7 697	4 290	1	69	12 057
Total segment revenue and other operating income	**353 113**	**299 389**	**85 275**	**3 772**	**741 549**
Cost of materials, licenses and services	-46 816	-127 915	-36 827	-116	-211 675
Operating expenses	-209 428	-154 967	-65 941	-20 173	-450 509
Operating income before depreciation, amortization and impairment	**96 868**	**16 506**	**-17 492**	**-16 517**	**79 365**
Depreciation, amortization and impairment	-24 813	-17 754	-5 026	-678	-48 271
Operating income - excluding corporate common functions	**72 055**	**-1 248**	**-22 518**	**-17 195**	**31 094**
Corporate common function expenses					-15 039
Interest expense and other finance income/(expense), net					-25 205
Share of result of associates	1 069	825	–	–	1 894
Income before tax from continuing operations					**-7 256**
	31.12.2020	31.12.2020	31.12.2020	31.12.2020	31.12.2020
Total segment assets	**665 830**	**340 909**	**139 261**	**37 832**	**1 183 832**

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In USD'000	31.12.2021	31.12.2020
Total segment assets	1 217 691	1 183 832
Cash and cash equivalents	2 284	14 257
Other current assets	403	161
Financial assets and other non-current assets	5 062	6 069
Asset of disposal group classified as held for sale	–	12 777
Total Assets as per Balance Sheet	**1 225 441**	**1 217 096**

GEOGRAPHICAL INFORMATION

The Group's country of domicile is Switzerland. The Group's revenue from external customers and information about its non-current assets by country are presented below:

	Revenues from external customers		Non-current assets	
In USD'000	2021	2020	31.12.2021	31.12.2020
Switzerland	50 562	49 118	36 311	68 809
United States of America	203 542	218 088	271 510	257 077
France	55 528	49 591	8 557	10 494
Netherlands	42 415	43 449	1 160	1 274
Italy	41 729	27 520	6 791	7 407
Germany	36 953	31 978	4 818	5 431
Rest of the world	323 203	309 749	186 378	226 078
	753 932	**729 492**	**515 525**	**576 570**

Non-current assets exclude financial instruments, deferred tax assets and employment benefit assets. Revenues are allocated to countries on the basis of the end-customer's location.

INFORMATION ABOUT MAJOR CUSTOMERS

No aggregate revenues resulting from transactions with a single external customer amount to 10% of the Group's total revenues.

REVENUE CATEGORIES

	Digital TV		Public Access		Cybersecurity		Internet of Things	
In USD'000	2021	2020	2021	2020	2021	2020	2021	2020
Europe	177 645	154 501	169 902	175 808	32 118	26 633	5 027	2 586
Americas	104 867	124 536	71 820	83 251	74 874	58 574	2 349	1 045
Asia and Africa	72 563	66 379	42 420	36 040	303	68	44	72
	355 075	**345 416**	**284 142**	**295 099**	**107 295**	**85 275**	**7 419**	**3 703**
Sale of goods	80 792	72 862	164 002	177 491	18 267	11 879	510	40
Services rendered	183 805	191 745	93 314	86 698	55 761	44 626	6 603	3 156
Royalties and licenses	90 479	80 809	26 826	30 910	33 267	28 769	306	508
	355 075	**345 416**	**284 142**	**295 099**	**107 295**	**85 275**	**7 419**	**3 703**

5. OTHER OPERATING INCOME

In USD'000	2021	2020
Government grants (research, development and training)	3 951	5 547
COVID-19 subsidies	530	793
Income from rental of property	4 137	4 309
Gain on disposal of assets	268	259
Gain on sale-and-leaseback	13 664	–
Contingent consideration received	547	–
Others	1 804	1 149
	24 900	**12 057**

6. EMPLOYEE BENEFITS EXPENSE

In USD'000	Note	2021	2020
Wages and salaries		314 653	305 468
Social security costs		43 748	43 047
Defined benefit plans expenses	28	10 483	1 347
Defined contribution plans expenses		7 799	8 262
Other personnel expenses		9 468	10 009
		386 152	**368 132**

7. OTHER OPERATING EXPENSES

In USD'000	2021	2020
Development and engineering expenses	10 925	10 290
Travel, entertainment and lodging expenses	16 502	14 885
Legal, experts and consultancy expenses	18 206	19 383
Administration expenses	27 369	24 813
Building and infrastructure expenses	11 632	10 706
Marketing and sales expenses	3 552	7 676
Taxes other than income tax	2 972	3 320
Change in provisions	-2 410	872
Insurance, vehicles and others	6 800	5 471
	95 547	**97 417**

8. DEPRECIATION, AMORTIZATION AND IMPAIRMENT

In USD'000	Note	2021	2020
Land and buildings	13	2 555	2 528
Equipment and machines	13	7 808	9 767
Total depreciation and impairment of tangible fixed assets		**10 363**	**12 295**
Land and buildings	15	11 834	12 825
Vehicles, equipment and other	15	2 603	2 939
Total depreciation and impairment of right-of-use assets		**14 437**	**15 764**
Intangible assets	14	17 328	20 212
Total amortization and impairment on intangible fixed assets		**17 328**	**20 212**
Depreciation, amortization and impairment		**42 128**	**48 271**

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9. INTEREST EXPENSE

In USD'000	Note	2021	2020
Interest expense:			
- Bond 2015-2022	27	4 103	4 153
- Bond 2016-2024	27	2 542	2 503
- Net interest expense recognized on defined benefit plans	28	217	250
- Interest on lease obligations	15	1 255	1 416
- Other and bank charges		1 656	2 074
		9 774	**10 397**

10. OTHER FINANCE INCOME/(EXPENSE), NET

In USD'000	Note	2021	2020
Interest income		1 664	1 239
Net gains/(losses) on foreign exchange related derivative financial instruments		89	220
Net foreign exchange transaction gains/(losses)		1 572	-15 401
Others		-1 217	-865
		2 107	**-14 808**

11. INCOME TAX EXPENSE

In USD'000	Note	2021	2020
Current income tax		-75	-146
Deferred income tax	17	-668	-8 028
Non-refundable withholding tax		-2 479	-2 559
		-3 222	**-10 732**

The tax on the Group's income before tax differs from the theoretical amount that would arise using the weighted average tax rate applicable to profits of the consolidated companies as follows:

In USD'000	2021	2020
Income before tax	**24 672**	**-7 256**
Expected tax calculated at domestic tax rates in the respective countries	-5 640	1 719
Effect of income not subject to income tax or taxed at reduced rates	2 603	2 759
Effect of utilization of previously unrecognized tax asset on tax losses carried forward and temporary differences	2 691	7 462
Effect of temporary differences and tax losses not recognized and deferred tax assets written-off	-2 852	-19 975
Effect of changes in tax rates	-410	-6
Effect of associates' result reported net of tax	–	90
Effect of disallowed expenditures	-2 278	-2 400
Effect of prior year income taxes	2 537	870
Effect of non-refundable withholding tax	-2 479	-2 559
Other	2 606	1 308
Tax expense	**-3 222**	**-10 732**

Income before tax for tax-transparent companies includes the full income before tax of non-fully-owned subsidiaries whose income taxes are paid by the subsidiaries' shareholders. However, the Group only recognizes its ownership percentage tax portion. The theoretical tax impact if the Group had recognized 100% of the taxes on these subsidiaries amounts to kUSD 1 452 (2020: kUSD 1 454) and is included in 'Other' in the above table.

In response to the COVID-19 pandemic, various tax authorities allowed for carryback treatment of operating losses to generate refunds of previously paid income taxes. During 2020, the Group recognized a tax benefit of kUSD 3 635 in the United States and in Austria the Group recognized a tax refund of kUSD 1 426 due to operating losses incurred during the year.

The weighted average applicable tax rate decreased from 23.7% in 2020 to 22.9% in 2021. The decrease can be explained by a different revenue split between countries.

12. EARNINGS PER SHARE (EPS)

Basic and diluted earnings per share

Basic and diluted earnings per share is calculated by dividing the profit attributable to equity holders of the company by the weighted average number of shares outstanding during the year.

In USD'000	2021	2020
Net income attributable to bearer shareholders	13 371	-21 248
- Continuing operations	*14 369*	*-21 248*
- Discontinued operations	*-997*	*-*
Net income attributable to registered shareholders	1 221	-1 954
- Continuing operations	*1 312*	*-1 954*
- Discontinued operations	*-91*	*-*
Total net income attributable to equity holders	**14 592**	**-23 202**
Weighted average number of bearer shares outstanding	50 707 298	50 354 857
Weighted average number of registered shares outstanding	46 300 000	46 300 000
Basic and diluted earnings per share (in USD)		
Attributable to shareholders of Kudelski SA for bearer shares : basic and diluted (in USD)	0.2637	-0.4220
- Continuing operations	*0.2834*	*-0.4220*
- Discontinued operations	*-0.0197*	*-*
Attributable to shareholders of Kudelski SA for registered shares : basic and diluted (in USD)	0.0264	-0.0422
- Continuing operations	*0.0284*	*-0.0422*
- Discontinued operations	*-0.0020*	*-*

The company has no share options nor share subscription rights outstanding which could lead to a dilution of earnings per share.

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13. TANGIBLE FIXED ASSETS

In USD'000	Land	Buildings	Building improve-ments	Technical equipment and machinery	Other equipment	Total
GROSS VALUES AT COST						
As of January 1, 2020	**24 325**	**111 134**	**16 170**	**102 054**	**18 195**	**271 877**
Additions	–	1 595	855	2 888	1 356	6 694
Disposals and retirements	–	–	-744	-5 705	-2 419	-8 867
Currency translation effects	1 636	7 456	526	8 321	692	18 631
Reclassification & others	–	–	72	-2 698	2 616	-10
As of January 1, 2021	**25 961**	**120 185**	**16 879**	**104 859**	**20 440**	**288 324**
Additions	–	614	1 893	3 931	979	7 417
Disposals and retirements	-18 471	-64 308	-5 658	-2 131	-782	-91 350
Currency translation effects	-610	-3 709	-461	-5 345	-571	-10 696
Reclassification & others	–	–	329	194	-523	–
As of December 31, 2021	**6 880**	**52 781**	**12 982**	**101 509**	**19 543**	**193 694**
ACCUMULATED DEPRECIATION AND IMPAIRMENT						
As of January 1, 2020	**–**	**-45 677**	**-11 229**	**-75 142**	**-13 046**	**-145 094**
Systematic depreciation	–	-751	-1 777	-7 850	-1 917	-12 295
Disposals and retirements	–	2	629	5 683	2 209	8 523
Currency translation effects	–	-4 124	-382	-6 704	-545	-11 755
Reclassification & others	–	–	-8	2 363	-2 355	–
As of January 1, 2021	**–**	**-50 550**	**-12 767**	**-81 651**	**-15 654**	**-160 621**
Systematic depreciation	–	-848	-1 707	-6 015	-1 794	-10 363
Disposals and retirements	–	37 035	4 678	2 112	759	44 585
Currency translation effects	–	2 006	314	3 897	429	6 645
Reclassification & others	–	–	-253	95	158	–
As of December 31, 2021	**–**	**-12 357**	**-9 735**	**-81 561**	**-16 102**	**-119 754**
Net book values as of December 31, 2020	**25 961**	**69 635**	**4 112**	**23 209**	**4 787**	**127 704**
Net book values as of December 31, 2021	**6 880**	**40 424**	**3 247**	**19 948**	**3 441**	**73 940**
Useful life in years	Indefinite	10 – 50	4 – 8	4 – 10	4 – 7	

In USD'000	31.12.2021	31.12.2020
Corporate buildings on land whose owner has granted a permanent and specific right of use	8 618	12 497

Technical equipment and machinery includes assets made available to clients which generate recurring service revenue.

The Group reviews the estimated useful lives and residual values of its fixed assets on an ongoing basis, based upon, among other things, its experience with similar assets, conditions in the relevant market, and prevailing industry practice. Disposals of Land and Building assets during 2021 are related to the sale-and-leaseback of Corporate buildings in Switzerland (note 15).

14. INTANGIBLE ASSETS

In USD'000	Technol-ogy	Customer lists, Trade-marks & Brands	Software	Goodwill	Other intangibles	Total
GROSS VALUES AT COST						
As of January 1, 2020	**112 965**	**71 302**	**97 604**	**351 246**	**426**	**633 543**
Additions	2 674	–	1 291	–	–	3 965
Disposals and retirements	-17	-490	-32 866	–	–	-33 373
Reclassification & others	–	–	–	–	11	11
Currency translation effects	8 979	1 397	6 676	6 086	34	23 172
As of January 1, 2021	**124 601**	**72 210**	**72 705**	**357 332**	**471**	**627 317**
Additions	4 351	1 449	674	–	–	6 474
Disposals and retirements	–	–	-550	–	–	-550
Currency translation effects	-4 988	-1 658	-2 595	-6 354	-27	-15 623
As of December 31, 2021	**123 964**	**72 000**	**70 234**	**350 977**	**443**	**617 618**
ACCUMULATED DEPRECIATION AND IMPAIRMENT						
As of January 1, 2020	**-103 889**	**-42 978**	**-78 840**	**–**	**-426**	**-226 133**
Systematic amortization	-2 670	-8 220	-9 318	–	-4	-20 212
Recovery of amortization on disposal and retirements	–	490	32 866	–	–	33 356
Currency translation effects	-8 156	-1 325	-5 456	–	-33	-14 971
As of January 1, 2021	**-114 714**	**-52 034**	**-60 749**	**–**	**-463**	**-227 959**
Systematic amortization	-2 247	-6 475	-8 602	–	-3	-17 328
Recovery of amortization on disposal and retirements	–	–	550	–	–	550
Currency translation effects	4 236	1 305	2 157	–	27	7 725
As of December 31, 2021	**-112 725**	**-57 204**	**-66 643**	**–**	**-439**	**-237 011**
Net book values as of December 31, 2020	**9 886**	**20 176**	**11 956**	**357 332**	**8**	**399 358**
Net book values as of December 31, 2021	**11 238**	**14 796**	**3 591**	**350 977**	**4**	**380 607**
Useful life in years	4 – 10	5 – 10	3 – 4	Indefinite	4	

Intangible assets with indefinite useful lives are subject to a yearly impairment review.

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Goodwill is tested for impairment at least annually and when there is an indication of impairment. The impairment tests of goodwill are performed at the same time each year and at the cash-generating unit (CGU) level, defined within the framework of the Group as its operating segments. In accordance with IFRS 8, the Group reports four operating segments: Digital TV, Cybersecurity, Internet of Things (IoT) and Public Access (Note 4).

Goodwill allocated to each operating segment is tested for impairment using a value-in-use calculation, which corresponds to the segment's future projected cash flows discounted at an appropriate pre-tax rate of return. Cash flow projections are based on the financial plans and business strategies of Group management covering a period of five years and projected to perpetuity using a multiple which corresponds to a steady or declining growth rate. The Group assesses the uncertainty of these estimates by making sensitivity analyses. The discount rates used reflect the current assessment of the time value of money and the risks specific to each operating segment. Any impairment loss in respect of goodwill is never subsequently reversed.

The following sets out the allocated goodwill and key assumptions used in the impairment test for each segment:

2021	Carrying amount	Period of cash flow projections	Annual sales growth	Annual margin evolution	Terminal growth rate	Pre-tax discount rate
Goodwill CGU						
Digital TV	214 492	5 years	-4% to 3%	Declining	1.5%	8.50%
Public Access	35 689	5 years	1% to 9%	Stable	2.0%	9.50%
Cybersecurity	64 948	5 years	15% to 25%	Improvement	2.2%	8.75%
IoT	35 848	5 years	50% to 123%	Improvement	2.2%	8.50%
	350 977					

2020	Carrying amount	Period of cash flow projections	Annual sales growth	Annual margin evolution	Terminal growth rate	Pre-tax discount rate
Goodwill CGU						
Digital TV	218 359	5 years	-6% to 4%	Declining	1.5%	8.75%
Public Access	36 359	5 years	4% to 6%	Stable	2.0%	10.00%
Cybersecurity	66 119	5 years	2% to 15%	Improvement	2.2%	8.75%
IoT	36 495	5 years	48% to 114%	Improvement	2.2%	8.50%
	357 332					

The following has been taken into consideration in the impairment tests:

- assumed cost of capital for each segment is based on the cost of equity of comparable businesses adjusted for the segment capital structure. The resulting weighted average cost of capital is then adjusted to include tax effects specific to the jurisdiction in which the segment operates. Net operating loss carryforwards are not considered when determining the tax effects.
- cash flows for the first five years were based upon financial plans approved by Group management which are consistent with the Group's approved strategy for this period. They are based upon past performance and current initiatives.
- terminal growth rates have been determined to reflect the long-term view of the nominal evolution of the business.

Digital TV

Digital TV revenue assumptions are based on bottom-up projections by product groups, key accounts and regions. Such projections are completed by segment management in collaboration with product managers and account managers. Projections are subsequently adjusted at the Group management level to include contingencies related to uncertainties of the business development. Margin assumptions are derived from historical performance, pricing trends, and expected product mix. Operating cost assumptions are based on historical expenditures and projected based on anticipated business actions and outlook over the forecast period.

Segment management assumes declining revenues over the first years of the planning period, as the subscriber base of established pay-TV operators is expected to continue shrinking. In the later years of the planning period, revenues are expected to stabilize and revert to growth, as emerging product lines (e.g. anti-piracy activities) gain traction.

Cybersecurity
The Kudelski Security leadership team provided a 5-Year P&L forecast. To develop this plan, the leadership team reviewed and developed a forecast for each of its lines of business (technology, services, managed services CFC, managed services L1/L2, innovation, marketing/PMO) in each of the geographical areas of operation (US and EMEA). Management assumed growth rates by line of business and geography taking into account factors such as market outlook, positioning, growth investments and past track record. Management assumed constant gross margins for each line of business. OPEX growth was determined taking into account the capacity required to deliver the planned revenue base and to sustain further growth. Group management evaluated and adjusted the forecast submission to take into account business development risks and to ensure that the strategic focus areas are in line with reasonable growth and spending assumptions.

Following a stabilization of the cybersecurity business in 2020, Cybersecurity delivered strong revenue growth in 2021. In addition to growing high value software based and service deployments as well as managed security and advisory services, Cybersecurity managed to stabilize its technology reselling business, posting a significant year-on-year growth. In 2022, Cybersecurity is expected to continue to benefit from favorable technology adoption trends and maintain momentum over the planning period, as the segment continues to gain traction in the higher margin managed security services space and innovation space.

Internet of Things (IoT)
The strategic shift of the IoT activities, including in particular the introduction of a new IoT Solutions product line, resulted in the development of a new business plan in 2020, mainly driven by the expected adoption of the segment's asset tracking solutions. In the new plan, the focus shifts to end-to-end IoT solutions, including in particular the asset tracking product set, with an assumption that IoT platform revenues will gain momentum in the later years of the planning period. In 2021, the IoT leadership team adjusted the prior year's plan, integrating the learnings from the launch of the net asset tracking business line and taking into account the impact of market factors such as COVID and supply chain constraints.

IoT revenue projections by business line are based on volume and pricing projections for the early years in the plan and take into account the existing customer pipeline and backlog. Projections are subsequently adjusted at the Group management level to include contingencies related to the uncertainty of the business development. Operating cost assumptions are mainly based on the cost base required for the implementation of the current product roadmap as well as the further development of the product portfolio.

In 2021, IoT segment revenues more than doubled compared to the prior year, thus validating prior business plan assumptions. The Group expects strong growth momentum with solid two digit growth rates to continue for the following years, driven by the adoption of its asset tracking product portfolio and volume deployments of the KeySTREAM platform.

Public Access
Public Access revenue assumptions are based on continued development from existing products and customers. The SKIDATA management team developed sales and gross profit assumptions by region (APAC, Europe, Latin America, MEA, North America and Central) and validated these assumptions against projections by product groups (i.e., new facilities, modernizations and extensions, operational services, consumable products, SaaS). Projections are subsequently adjusted at the Group management level to include contingencies related to the uncertainty of the business development. Margin assumptions are derived from historical performance, pricing trends, and expected product mix. Of all our business units, Public Access is the most significantly affected by COVID-19, as large customers, including airports, shopping centers and stadiums, continued to postpone new deployments and asset refreshment projects. However, Public Access continues to provide a relevant portfolio of of products and services, which is expected to result in recovering revenues.

Operating cost assumptions are based on historical expenditures and projected based on anticipated business actions and outlook over the forecast period. During the last two years, the Group focused on the implementation of measures aimed at mitigating the negative business impact of the COVID-19 crisis. Structural measures, including in particular a tighter integration of SKIDATA market entities and central functions as well as a closer coordination with other Group activities were launched in 2020 and completed throughout 2021. Such measures are aimed at improving Public Access structural profitability and cash flow generation.

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Management believes that reasonably possible changes to any of the above key assumptions would not cause the operating segment's recoverable amount to fall below the carrying value of the segment, except for goodwill of Cybersecurity and IoT, for which material changes in recurring revenues and revenue growth assumptions could result in a potential goodwill impairment. Considering the high level of annual planned sales growth, a 16.3% reduction of the assumed annual growth rate in the Cybersecurity segment and a 8.0% reduction of the assumed annual growth rate in the IoT segment, without any adjustment of operating expenses, would lead to a value-in-use equal to the carrying amount of goodwill at the end of the planning period.

15. LEASING

In USD'000	31.12.2021	31.12.2020
Land and buildings	47 298	37 028
Vehicles, equipment and other	3 448	4 611
	50 746	**41 639**

In USD'000	Land	Building & leasehold facilities	Vehicles	Equipment	Total
GROSS RIGHT-OF-USE ASSETS					
As of January 1, 2020	**770**	**47 535**	**7 961**	**198**	**56 464**
Change in accounting policy	173	14 486	1 953	–	16 612
Disposals and retirements	–	-7 458	-1 465	-2	-8 926
Currency translation effects	81	1 794	557	11	2 442
As of January 1, 2021	**1 024**	**56 357**	**9 006**	**206**	**66 592**
Additions	–	23 607	1 673	117	25 398
Disposals and retirements	-135	-4 699	-2 189	-2	-7 025
Currency translation effects	-69	-1 701	-513	-15	-2 298
As of December 31, 2021	**820**	**73 564**	**7 977**	**306**	**82 667**
ACCUMULATED DEPRECIATION AND IMPAIRMENT					
As of January 1, 2020	**-39**	**-12 304**	**-2 550**	**-54**	**-14 946**
Systematic depreciation	-45	-12 781	-2 888	-51	-15 764
Recovery of depreciation on disposal and retirements	–	5 611	1 203	2	6 816
Currency translation effects	-7	-789	-256	-7	-1 059
As of January 1, 2021	**-90**	**-20 263**	**-4 491**	**-110**	**-24 954**
Systematic depreciation	-45	-11 789	-2 513	-91	-14 437
Recovery of depreciation on disposal and retirements	–	4 234	2 097	2	6 332
Currency translation effects	8	858	263	8	1 138
As of December 31, 2021	**-126**	**-26 959**	**-4 644**	**-191**	**-31 921**
Net book values as of December 31, 2020	**934**	**36 094**	**4 514**	**96**	**41 639**
Net book values as of December 31, 2021	**693**	**46 605**	**3 333**	**116**	**50 746**
Useful life in years	4 – 10	5 – 10	2 – 5	2 – 5	

Lease costs are recorded in the income statement as depreciation expense in the amont of kUSD 14 437 (2020: kUSD 15 764) and interest expense of kUSD 1 255 (2020: kUSD 1 416), and are recognized in the cash flow statement as adjustments to net income non-cash items in operating activities. Lease payments of kUSD 14 756 (2020: kUSD 16 699) which represent the reduction of the lease liability are recognized in the cash flow statement as an outflow from financing activities. Operating lease costs relating to short-term leases of kUSD 5 822 (2020: kUSD 5 830) and low-value leases of kUSD 319 (2020: kUSD 218) remain fully recognized as an operational expense. The total cash outflow for leases in 2021 was kUSD 22 153 (2020: kUSD 24 163).

The Group's remaining contractual maturities of lease obligations at December 31, 2021 and 2020 are as follows:

In USD'000	2021	2020
Within one year	15 114	13 720
In the second to fifth year inclusive	38 950	24 340
More than five years	37 554	5 259
	91 618	**43 318**

SALE-AND-LEASEBACK TRANSACTIONS

In September 2021, the Group completed a sale-and-leaseback transaction involving a satellite office building located in Lausanne, Switzerland. The building was sold for kUSD 20 783 and leased back for an initial term of fifteen years, with specified renewal options for up to an additional ten years. The annual rental payment for the property is approximately kUSD 1 094 and includes cost of living adjustments over the initial term. The Group recorded a gain on the sale-and-leaseback of kUSD 5 867 which is recognized in 'Other operating income' in the consolidated income statement. The Group also recognized a right-of-use asset and corresponding lease obligation of kUSD 2 409 and kUSD 13 454, respectively.

In addition, during December 2021, the Group completed the sale-and-leaseback of properties hosting the Group's headquarters in Cheseaux, Switzerland for an amount of kUSD 82 037. The investor group that acquired the properties includes members of the Kudelski family, a long-time shareholder of the Group, the Group's Swiss pension fund and Nagravision. We have performed an assessment and came to the conclusion that control for the properties has been transferred and Nagravision's remaining interest in the property has been accounted for as an 'Investment in associate' (note 16). The building was leased for an initial term of fifteen years, with specified renewal options for up to an additional ten years. The annual rental payment for the properties is approximately kUSD 3 555 and includes cost of living adjustments over the initial term. The Group recorded a gain on the sale-and-leaseback of kUSD 7 797 which is included in 'Other operating income' in the consolidated income statement. The Group also recorded right-of-use assets and corresponding lease obligations of kUSD 18 936 and kUSD 45 690, respectively.

16. INVESTMENTS IN ASSOCIATES

In USD'000	2021	2020
At January 1	**7 007**	**6 309**
Acquisition of an associate	2 290	–
Share of profit	2 111	1 894
Dividends received	-1 911	-398
Reclassification to fair value through profit and loss	–	-1 073
Currency translation effects	-162	274
At December 31	**9 335**	**7 007**

During 2021, the Group invested kUSD 4 922 in Kudelski Buildings Sarl. This amount is offset by its proportion of the gain on sale-and-leaseback transaction of kUSD 2 632.

The Group's interests in its principal associates, all of which are unlisted, were as follows:

		Interest held	
Name of associate	**Principal activity**	**2021**	**2020**
APT-SkiData Ltd, United Kingdom	Sales of Public Access products	26%	26%
SKIDATA Parking Systems, Hong-Kong	Sales of Public Access products	26%	26%
SKIDATA India Private Limited, India	Sales of Public Access products	49%	49%
SJack GmbH, Austria	Sales of Public Access products	26%	26%
Swiss Peak Experience SA, Switzerland	Sales of Public Access products	45%	45%
iWedia SA, Switzerland	Middleware for set-top-boxes	40%	40%
Kudelski Buildings Sàrl	Real estate company	22.5%	0%

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SUMMARIZED FINANCIAL INFORMATION OF THE GROUP'S ASSOCIATES

In USD'000	31.12.2021	31.12.2020
Total assets	101 425	40 472
Total liabilities	60 647	21 627
Net assets	40 778	18 845
Group's share of associates' net assets	11 430	6 422

	2021	2020
Revenue	49 518	49 003
Result of the period	6 154	5 683
Group's share of associates' result for the period	2 111	1 894

17. DEFERRED INCOME TAXES

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income taxes relate to the same fiscal authority. The offset amounts are as follows:

In USD'000	31.12.2021	31.12.2020
Deferred tax assets	44 054	50 858
Deferred tax liabilities	-2 050	-3 195
	42 004	**47 663**

Movement on the deferred income tax account is as follows:

In USD'000	Note	2021	2020
At January 1		**47 663**	**53 504**
Exchange differences		-1 566	2 319
Recognized against other comprehensive income		-3 426	-131
Income statement (expense)/income	11	-668	-8 028
At December 31		**42 004**	**47 663**

The movement in deferred tax assets and liabilities during 2021, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

In USD'000	At January 1, 2021	Income statement effect	Other Comprehensive income	Currency translation effects	At December 31, 2021
Deferred tax assets associated with					
- intangibles	2 439	-459	–	-75	1 905
- employee benefits	6 642	135	-3 413	-284	3 080
- tax losses	33 787	-6 374	–	-760	26 652
- provisions and other elements tax deductible when paid	5 756	738	12	-405	6 100
- intercompany profit elimination	4 419	-380	–	-303	3 736
- leases	190	5 010	–	5	5 205
- others	536	-155	-25	-15	341
Total deferred tax assets (gross)	**53 768**	**-1 486**	**-3 426**	**-1 837**	**47 020**
Deferred tax liabilities associated with					
- intangibles	-3 577	1 021	–	81	-2 475
- provisions and accelerated tax depreciation	-1 928	1 375	–	107	-446
- others	-600	-1 578	–	83	-2 094
Total deferred tax liabilities (gross)	**-6 105**	**818**	**–**	**271**	**-5 016**
Net deferred tax asset/(liability)	**47 663**	**-668**	**-3 426**	**-1 566**	**42 004**

And for 2020:

In USD'000	At January 1, 2020	Income statement effect	Other Comprehensive income	Currency translation effects	At December 31, 2020
Deferred tax assets associated with					
- intangibles	3 658	-1 471	–	251	2 439
- employee benefits	7 023	-830	-141	590	6 642
- tax losses	38 543	-5 907	–	1 150	33 787
- provisions and other elements tax deductible when paid	8 325	-2 515	10	-64	5 756
- intercompany profit elimination	5 388	-1 347	–	378	4 419
- others	628	-137	–	45	536
Total deferred tax assets (gross)	**63 565**	**-12 206**	**-131**	**2 350**	**53 578**
Deferred tax liabilities associated with					
- intangibles	-4 919	1 397	–	-56	-3 577
- provisions and accelerated tax depreciation	-4 097	2 265	–	-95	-1 928
- leases	-169	343	–	16	190
- others	-876	173	–	103	-600
Total deferred tax liabilities (gross)	**-10 061**	**4 178**	**–**	**-32**	**-5 915**
Net deferred tax asset/(liability)	**53 504**	**-8 028**	**-131**	**2 319**	**47 663**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2021

UNRECOGNIZED TAX LOSSES CARRIED FORWARD

At the balance sheet date, the Group has unused tax losses and temporary differences of mUSD 1 311.9 (2020: mUSD 1 421.3) available for offset against future profits. A deferred tax asset has been recognized in respect of mUSD 344.9 (2020: mUSD 370.7) of such losses and temporary differences. No deferred tax asset has been recognized for the remaining mUSD 967.0 (2020: mUSD 1 050.6) due to the unpredictability of future profit streams. The amount of unused tax losses carried forward which have not been capitalized as deferred tax assets, with their expiry dates, is as follows:

In USD million	2021	2020
Expiration within:		
One year	10.7	40.0
Two years	23.4	29.1
Three years	122.0	28.9
Four years	148.0	129.1
Five years	152.4	152.5
More than five years	510.5	671.0
Total	**967.0**	**1 050.6**

18. FINANCIAL ASSETS AND OTHER NON-CURRENT ASSETS

In USD'000	31.12.2021	31.12.2020
Financial assets at amortized cost:		
Loan – third party	12 366	12 572
State and government institutions	4 877	7 681
Trade accounts receivable (long-term portion)	12 539	18 257
Guarantee deposits	1 878	2 275
Prepaid expenses and accrued income (long-term portion)	133	32
Total financial assets at amortized cost	**31 792**	**40 817**
Financial assets at fair value through profit or loss:		
Equity instruments (level 3)	1 152	1 188
Marketable securities (level 1)	–	994
Total financial assets at fair value through profit or loss	**1 152**	**2 182**
Other non-current assets:		
Deferred rent	896	863
Total other non-current assets	**896**	**863**
Total	**33 840**	**43 862**

The equity instruments are measured using a discounted cash flow method provided by the company on a yearly basis.

The effective interest rate on third party loans is 1.83% (2020: 1.83%). State and government institutions include government grants for R&D projects that will not be received within the next 12 months. The long-term portion of trade accounts receivable includes, among others, discounted revenues related to the licensing of the Group intellectual property portfolio.

19. INVENTORIES

In USD'000	31.12.2021	31.12.2020
Raw materials	2 898	3 861
Work in progress	6 881	4 983
Finished goods	44 600	50 353
	54 378	**59 197**

The cost of inventories recognised as an expense includes kUSD 2 273 (2020: kUSD 2 363) in respect of write-downs, and has been reduced by kUSD 605 (2020: kUSD 314) in respect of the reversal of such write-downs.

Changes in inventories of finished goods and work in progress included in cost of material are kUSD -5 590 (2020: kUSD -5 174).

20. TRADE ACCOUNTS RECEIVABLE AND CONTRACT ASSETS

In USD'000	31.12.2021	31.12.2020
Trade accounts receivable	178 101	209 654
Less: provision for impairment	-16 166	-26 202
Trade accounts receivable related parties	1 579	1 024
Trade accounts receivable - net	**163 514**	**184 476**
Contract assets	37 842	44 779
Less: provision for impairment	-1 108	-197
Contract assets - net	**36 733**	**44 582**

Before accepting a new customer, the Group performs a credit scoring to assess the potential customer's credit quality and defines specific credit limits. Limits and scoring are regularly reviewed. Furthermore, for low value added business deliveries, the Group usually works on a back to back basis.

The following table summarizes the movement in the provisions for impairment of trade accounts receivable and contract assets:

	Contract assets		Trade accounts receivable	
In USD'000	**2021**	**2020**	**2021**	**2020**
January 1,	**-197**	**-128**	**-26 202**	**-29 397**
Provision for impairment charged to income statement	-998	-75	-1 283	-4 997
Utilization	–	–	2 279	5 792
Reversal	77	20	8 262	3 201
Translation effects	10	-15	779	-801
December 31,	**-1 108**	**-197**	**-16 166**	**-26 202**

The creation and release of the provision for impairment are included in other operating expenses in the income statement. Provisions recognized for the impairment of trade receivables amount to kUSD -1 283 (2020: kUSD -4 997). Amounts charged to the provision for impairment account are written-off when there is no expectation to recover additional cash.

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The Group applies the IFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade accounts receivables and contract assets. On that basis, the provisions for impairment of trade accounts receivable and contract assets as of December 31, 2021 and 2020 were determined as follows:

In USD'000	Gross carrying amount	Expected loss rate	Provision for impairment 31.12.2021	Gross carrying amount	Expected loss rate	Provision for impairment 31.12.2020
Trade accounts receivable not overdue	104 818	0.4%	406	119 396	0.3%	389
Past due:						
- not more than one month	25 729	0.9%	222	27 273	0.9%	257
- more than one month and not more than three months	18 161	2.2%	391	17 950	2.2%	390
- more than three months and not more than six months	7 597	11.0%	839	7 595	11.2%	847
- more than six months and not more than one year	6 068	41.6%	2 524	11 082	33.0%	3 656
- more than one year	15 728	74.9%	11 784	26 358	78.4%	20 663
Total	**178 101**		**16 166**	**209 654**		**26 202**
Contract assets	37 842	2.9%	1 108	44 779	0.2%	197
Total	**37 842**		**1 108**	**44 779**		**197**

The expected loss rates are based on payment profiles of sales from the individual Group companies and corresponding historical credit losses. The average loss rates displayed above may vary due to the mix of outstanding receivables within the Group companies.

21. OTHER FINANCIAL ASSETS AT AMORTIZED COST

In USD'000	31.12.2021	31.12.2020
Other receivables - third parties	11 067	11 560
Other receivables - related parties	1 412	1 423
Advances to suppliers and employees	5 480	2 533
State and government institutions	31 696	38 987
	49 655	**54 503**

22. OTHER CURRENT ASSETS

In USD'000	31.12.2021	31.12.2020
Prepaid expenses	10 333	8 685
Accrued income	32 478	29 035
Deferred contract cost (short-term portion)	–	193
Other receivables - third parties	638	637
	43 450	**38 549**

23. CASH AND CASH EQUIVALENTS

In USD'000	31.12.2021	31.12.2020
Cash at bank and in hand	280 832	145 937
Short-term deposits	3 657	6 647
	284 489	**152 584**

The effective interest rate on short term deposits was 0.58% (2020: 0.43%). The Group only enters into transactions with highly rated banks.

24. SHARE CAPITAL

ISSUED AND FULLY PAID SHARE CAPITAL

The share capital consists of 50 736 972 (2020: 50 372 600) bearer shares at CHF 8.00 par value each and 46 300 000 (2020: 46 300 000) registered shares at CHF 0.80 par value each. Each share confers the right to vote and is fully paid up. The counter-value for the share capital is kUSD 340 484 (2020: kUSD 337 295).

The registered shares are neither listed nor traded on any stock exchange. The bearer shares have been listed on the main market of the SIX since August 2, 1999 (ticker: KUD, security number: 1 226 836; ISIN CH0012268360).

AUTHORIZED SHARE CAPITAL

The Board of Directors is authorized to increase the share capital in one or more stages until 15 April 2022 by a maximum amount of CHF 32 705 312 through the issuance of 3 768 164 bearer shares with a nominal value of CHF 8.00 per share and 3 200 000 registered shares with a nominal value of CHF 0.80 per share to be fully paid up. The issuance price, the nature of the contributions, the date from which new shares shall give entitlement to dividends and other modalities of any share issuance shall be determined by the Board of Directors. The preferential subscription rights of shareholders may be excluded and allotted to third parties by the Board of Directors with a view to acquiring companies or parts of companies or in order to finance the whole or partial acquisition of other companies in Switzerland or abroad. All statutory restrictions on the transfer of shares are applicable to new registered shares.

CONDITIONAL SHARE CAPITAL

Conditional share capital consists of 10 000 000 (2020: 10 000 000) bearer shares at CHF 8.00 each to satisfy convertible bond exercise right and 576 784 (2020: 441 156) bearer shares at CHF 8.00 each to satisfy option exercise or share subscriptions to employees.

25. NON-CONTROLLING INTERESTS

The following table summarizes the information relating to each of the Group's subsidiaries in which it has material non-controlling interests, before any intercompany elimination:

		31.12.2021		31.12.2020
In USD'000	**Nagrastar**	**275 Sacramento Street LLC**	**Nagrastar**	**275 Sacramento Street LLC**
Non-controlling interests percentage	**50.0%**	**50.1%**	**50.0%**	**50.1%**
Non-current assets	1 509	38 088	1 558	37 971
Current Assets	38 766	182	30 603	627
Non-current liabilities	40	50	–	2 750
Current liabilities	10 954	179	11 628	418
Total Equity	**29 341**	**38 085**	**20 853**	**35 430**
Non-controlling interests percentage	50%	50.1%	50%	50.1%
Theoritical amount of non-controlling interests	14 670	19 081	10 426	17 751
Carrying amount of non-controlling interests	**14 670**	**19 081**	**10 426**	**17 751**
Revenue	21 536	4 239	23 297	4 409
Net result	8 488	2 655	7 998	2 679
Total comprehensive income	8 488	2 655	7 998	2 679
Total comprehensive income allocated to non-controlling interests	4 244	1 328	3 999	1 339
Dividend paid to non controlling interests	–	–	-10 000	–
Net increase /(decrease) in cash and cash equivalents	9 506	-454	-8 641	-57

These companies are treated as subsidiaries because the Group controls them either by financing or bearing an over-proportional responsibility for the main risks.

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26. LONG TERM FINANCIAL DEBT

In USD'000	Note	31.12.2021	31.12.2020
CHF 200 million 1.875% bond 2015/2022	27	–	225 770
CHF 150 million 1.5% bond 2016/2024	27	161 518	169 137
Long-term bank loans		35 352	44 285
		196 870	**439 192**

Long term bank loans effective interest rate is 0.80% (2020: 0.77%).

During 2020, several Group entities received loans through programs designed to provide economic support in response to COVID-19. The loans ranged in maturity from one to five years and generally contained beneficial terms such as governmental guarantees, interest rates ranging from zero to 0.98%, and options to extend. The programs also restricted the ability of borrowers to pay dividends and repay intercompany loan balances. When the stated interest rates were considered below market, a portion of the loan proceeds was recognized as a government grant. The grants were initially deferred and are recognized in earnings on a systematic basis over the loan period.

27. BONDS

On May 12, 2015 Kudelski SA issued a CHF 200 million bond with a subscription price of 100%, bearing an annual interest rate of 1.875% and maturing on August 12, 2022 at par, with denominations of CHF 5 000 nominal and multiples thereof. The proceeds amounted to kCHF 200 000 (kUSD 214 891) less issuance costs of kCHF 870 (kUSD 939) totaling an initial net proceed of kCHF 199 130 (kUSD 213 952) and resulting in an effective interest rate of 1.97%.

On September 27, 2016 Kudelski SA issued an additional CHF 150 million bond with a subscription price of 100%, bearing an annual interest rate of 1.5% and maturing on September 27, 2024 at par, with denominations of CHF 5 000 nominal and multiples thereof. The proceeds amounted to kCHF 150’000 (kUSD 154 384) less issuance costs of kCHF 665 (kUSD 684) totaling an initial net proceed of kCHF 149’335 (kUSD 153 700) and resulting in an effective interest rate of 1.58%.

During 2021, the Group repurchased nominal value of kUSD 16 845 relating to the 2015-2022 bond and kUSD 2 527 relating to the 2016-2024 bond. Total cash paid excluding accrued interest was kUSD 18 664. The gain on repurchase of kUSD 708 is included in ‘Other finance income/(expense), net’ in the consolidated income statement.

Bonds are recognized in the consolidated balance sheets as of December 31, as follows:

In USD'000	2021	2020
Initial balance	**394 907**	**360 826**
Amortization of transaction costs less premium	236	227
Reimbursement and repurchase	-19 372	–
Currency translation effects	-12 137	33 854
Liability component as of December 31	**363 635**	**394 907**
of which:		
- short-term portion (bond 2015/2022)	202 117	–
of which:		
- long-term portion (bond 2015/2022)	–	225 770
- long-term portion (bond 2016/2024)	161 518	169 137
	363 635	**394 907**

28. EMPLOYEE BENEFITS LIABILITIES

Defined benefit plan income, expense, plan assets and defined benefit obligations are determined by independent actuaries. Defined benefit obligations are calculated using the "Projected Unit Credit" method, and plan assets have been measured at fair market values. Most of the employee benefit obligation results from the Swiss pension plan.

SWITZERLAND

In addition to the legally required social security schemes, the Group has an independent pension plan. Swiss legislation prescribes that both the employer and the employee contribute a fixed percentage of the employee's insured salary to an external pension fund. Additional employers or employees' contribution may be required whenever the plan's statutory funding ratio falls below a certain level. The pension plan is run by a separate legal entity, governed by a Board of Trustees which consists of representatives nominated by the Group and by the active insured employees. The Board of Trustees is responsible for the plan design and the asset investment strategy. This plan covers all employees in Switzerland and is treated as a defined benefit plan with associated risks exposure being:

- Mortality risk: the assumptions adopted by the Group make allowance for future improvements in life expectancy. However, if life expectancy improves at a faster rate than assumed, this would result in greater payments from the plans and consequently increases in the plan's liabilities. In order to minimize the risk, mortality assumptions are reviewed on a regular basis.
- Market and liquidity risks: these are the risks that the investments do not meet the expected returns over the medium to long term. This also encompasses the mismatch between assets and liabilities. In order to minimize the risks, the structure of the portfolios is reviewed on a regular-basis.

ABROAD

Outside Switzerland, the Group sponsors twelve (2020: sixteen) other post-employment benefit plans treated as defined benefit plan according to IAS 19 revised. Post-employment benefit plan may include jubilee and termination benefits. Other post-employment benefit plans are not funded.

The following table sets forth the status of the pension plans and the amount that is recognized in the balance sheet:

In USD'000	31.12.2021	31.12.2020
Fair value of plan assets	244 445	223 368
Defined benefit obligation	-269 160	-272 185
Funded status	**-24 715**	**-48 817**
Other comprehensive income	21 002	-3 775
Prepaid/(accrued) pension cost	-45 717	-45 042
Funded status	**-24 715**	**-48 817**

In accordance with IAS 19, the following amount is recorded as net pension cost in the income statement for the financial years 2021 and 2020:

In USD'000	Note	2021	2020
Service cost		-17 562	-16 928
Employees contributions		5 746	5 513
Amortization of gains/(losses)		420	6
Curtailment gain / (loss)		–	89
Impact of plan amendment		912	9 974
Total recognized in employee benefits expense	**6**	**-10 483**	**-1 347**
Interest cost		-433	-645
Interest income		216	395
Total recognized in interest expense	**9**	**-217**	**-250**
Net pension (cost)/income		**-10 701**	**-1 597**

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The impact of plan amendment relates to a 2021 change in valuation method for the French pension plans.

The main assumptions used for the calculation of the pension cost and the defined benefit obligation for the years 2021 and 2020 are as follows:

	31.12.2021	31.12.2020
Switzerland		
Financial assumptions:		
- Discount rate	0.35%	0.10%
- Rate of future increase in compensations	1.50%	1.50%
- Rate of future increase in current pensions	0% for 5 years, then 0.75%	0% for 5 years, then 0.75%
Demographic assumptions:		
- Interest rate credited on savings accounts	1.00%	1.00%
- Turnover *(on average)*	12.0%	12.0%
- Demographic basis	LPP 2020 generational probability risk for disability reduced 25%	LPP 2020 generational probability risk for disability reduced 25%
- Retirement payment form	75% pension 25% lump sum	75% pension 25% lump sum
Abroad		
- Discount rate	1.76%	1.29%
- Rate of future increase in compensations	3.18%	2.84%
- Turnover *(on average)*	7.6%	8.4%

The weighted average duration of the defined benefit obligation is as follows :

	31.12.2021	31.12.2020
Weighted average duration of the defined benefit obligation in years		
Switzerland	19.3	20.0
Abroad	6.2	5.3

The changes in defined benefit obligation and fair value of plan assets during the years 2021 and 2020 are as follows:

A. Change in defined benefit obligation

In USD'000	**2021**	**2020**
Defined benefit obligation as of 1.1.	**-272 185**	**-242 640**
Service cost	-17 562	-16 928
Interest cost	-433	-645
Change in demographic assumptions	252	2 406
Change in financial assumptions	13 016	-4 862
Other actuarial gains / (losses)	-7 848	-7 171
Benefits payments	5 768	10 520
Exchange rate difference	8 921	-22 927
Curtailment	–	89
Plan amendment	912	9 974
Defined benefit obligation as of December 31,	**-269 160**	**-272 185**

Changes in demographic assumptions result from analysis of trends over the last six years and the impacts are disclosed in the above table under ‘Changes in demographic assumptions’. Other actuarial gains/(losses) are experience gains/(losses) arising due to differences between assumed and actual results.

B. Change in fair value of plan assets

In USD'000	2021	2020
Fair value of plan assets as of 1.1.	**223 368**	**191 568**
Interest income	216	395
Return on plan assets excluding interest income	19 509	10 459
Employees' contributions	5 746	5 513
Employer's contribution	8 187	7 196
Benefit payments	-5 768	-10 520
Exchange rate difference	-6 813	18 757
Fair value of plan assets as of December 31,	**244 445**	**223 368**

The actual return on plan assets amounts to kUSD 19 725 in 2021 (kUSD 10 854 for the year 2020) and includes an assumed interest income. The estimated employer's contribution to the pension plans for the year 2021 is kUSD 7 830.

The categories of plan assets, all of which are easily convertible to cash, are stated at their fair value at December 31, 2021 and 2020 as follows:

In USD'000	31.12.2021	Proportion in % 31.12.2021	31.12.2020	Proportion in % 31.12.2020
Cash	8 826	3.6%	6 099	2.7%
Swiss bonds	18 154	7.4%	18 083	8.1%
Non-Swiss bonds	58 657	24.0%	58 292	26.1%
Swiss shares	47 417	19.4%	41 649	18.6%
Non-Swiss shares	40 779	16.7%	38 924	17.4%
Real estate	44 260	18.1%	44 427	19.9%
Alternative investments	26 352	10.8%	15 894	7.1%
Total	**244 445**	**100.0%**	**223 368**	**100.0%**

Plan assets are quoted on liquid markets. The investment strategy pursues the goal of achieving the highest possible return on assets within the framework of its risk tolerance and thus of generating income on a long-term basis in order to meet all financial obligations. This is achieved through a broad diversification of risks over various investment categories, markets, currencies and industry segments.

The expected benefit payments for the next ten years are as follows :

In USD'000	Switzerland	Abroad
2022	10 586	645
2023	10 233	215
2024	9 841	275
2025	9 430	517
2026	8 464	153
2027-2031	45 129	4 104

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The following table shows the sensitivity of the defined benefit pension obligations to the principal actuarial assumptions based on reasonably possible changes to the respective assumptions occurring at the end of the reporting period:

	Change in 2021 year-end defined benefit obligation		Change in 2020 year-end defined benefit obligation	
	Switzerland	Abroad	Switzerland	Abroad
	In USD'000	In USD'000	In USD'000	In USD'000
50 basis point increase in discount rate	-22 722	-411	-23 648	-396
50 basis point decrease in discount rate	26 437	474	27 621	474
50 basis point increase in rate of salary increase	130	n/a	229	n/a
50 basis point decrease in rate of salary increase	-150	n/a	-246	n/a
50 basis point increase in rate of pension increase	9 387	n/a	9 772	n/a
50 basis point decrease in rate of pension increase	-8 634	n/a	-8 978	n/a
50 basis point increase of interest in saving accounts	8 153	n/a	8 476	n/a
50 basis point decrease of interest in saving accounts	-7 723	n/a	-8 015	n/a
50 basis point increase of turnover	-1 515	n/a	-1 880	n/a
50 basis point decrease of turnover	1 403	n/a	1 759	n/a

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of the defined benefit obligation calculated with the projected unit credit method at the end of the reporting period) has been applied as when calculating the defined benefit liability recognised in the balance sheet. The methods and types of assumptions used in preparing the sensitivity analysis did not change compared to the prior period.

29. OTHER LONG TERM LIABILITIES

In USD'000	31.12.2021	31.12.2020
Long-term loans - third parties	5 143	5 698
Deferred consideration	1 255	1 484
Contingent consideration	1 255	1 484
Other long-term liabilities	903	121
Deferred income	1 514	1 191
	10 070	**9 979**

The effective interest rate on long-term loans is 2.00% (2020: 2.00%.)

Deferred and contingent consideration balances include the long-term portions of deferred fixed and contingent earn-out payments in connection with business acquisitions. Assumptions for contingent consideration include a discount rate of 10.0% and are dependent on the achievement of certain financial performance targets of the acquired companies and are reviewed by management on a periodic basis.

30. SHORT TERM FINANCIAL DEBT

In USD'000	31.12.2021	31.12.2020
CHF 200 million 1.875% bond 2015/2022	202 117	–
Short-term bank borrowings	37 241	47 602
Other short-term financial liabilities	665	609
	240 023	**48 212**

The average effective interest rate paid in 2021 for short term bank borrowings was 1.41% (2020: 1.56%).

31. TRADE ACCOUNTS PAYABLE

In USD'000	31.12.2021	31.12.2020
Trade accounts payable – third parties	68 573	67 699
Trade accounts payable – related parties	14	33
	68 586	**67 732**

32. CONTRACT LIABILITIES

In USD'000	31.12.2021	31.12.2020
Amounts due to customers for contract work	6 219	5 111
Advances from clients	16 189	22 858
Deferred income	60 890	41 905
	83 298	**69 873**

33. OTHER CURRENT LIABILITIES

In USD'000	31.12.2021	31.12.2020
Accrued expenses	80 888	83 369
Payable to pension fund	1 512	1 757
Other payables	23 317	24 395
	105 718	**109 521**

34. DERIVATIVE FINANCIAL INSTRUMENTS

Derivatives are only used for economic hedging purposes and not as speculative instruments. Where derivatives do not meet the hedge accounting criteria or where the Group chooses not to designate derivatives as hedging instruments, they are classfied as "held-for-trading" for accounting purposes and are accounted for at fair value through profit or loss.

	Assets		Liabilities	
In USD'000	**31.12.2021**	**31.12.2020**	**31.12.2021**	**31.12.2020**
Cash flow hedge:				
- Foreign currency options	180	–	–	–
Held-for-trading:				
- Foreign currency options	–	–	-82	–
- Forward contracts	519	–	–	–
Total of derivatives financial instruments	**699**	**–**	**-82**	**–**

There were no long-term derivative instruments at December 31, 2021 and 2020.

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In USD'000	Cost of hedging reserve	Intrinsic value of options	Total hedge reserves
Balance at December 31, 2020	**–**	**–**	**–**
Change in fair value of hedging instruments recognized in OCI	–	158	158
Cost of hedging deferred and recognized in OCI	-7	–	-7
Balance at December 31, 2021	**-7**	**158**	**151**

The amounts included in cost of hedging reserve relate to the time value of options. All the amounts in the hedging reserve are in respect of transaction-related items, namely forecast sales transactions. The notional amount of options qualifiying for hedge accounting amounted to mUSD 27 in 2021 (2020: mUSD 27) with maturities between January and December and average strike rate of USD/CHF 0.9197 in 2021 (2020: USD/CHF 0.985). The foreign currency options are denominated in the same currency as the highly probable future sales transactions, therefore the hedge ration is 1:1. There was no hedge ineffectiveness during 2021 and 2020 relating to foreign currency options.

35. PROVISIONS FOR OTHER LIABILITIES AND CHARGES

In USD'000	Restructuring provisions	Provision for warranty	Litigations and others	Total 2021	Total 2020
As of January 1	**1 460**	**2 220**	**162**	**3 842**	**6 302**
Additional provisions	–	1 139	103	1 242	166
Unused amounts reversed	–	-215	-57	-272	-912
Used during the year	-1 329	-76	-134	-1 539	-2 036
Exchange differences	-50	-150	-7	-208	322
As of December 31	**80**	**2 918**	**67**	**3 065**	**3 842**
Thereof:					
- Short-term	80	2 918	67	3 065	3 842
- Long-term	–	–	–	–	–
	80	**2 918**	**67**	**3 065**	**3 842**

Restructuring provisions
Restructuring provisions in 2021 and 2020 primarily relate to headcount reduction measures impacting the Group's Digital TV operations.

Litigations and others
A number of Group companies are the subject of litigation arising out of the normal conduct of their business, as a result of which claims could be made against them. Such claims, in whole or in part, might not be covered by insurance. This provision disclosed in short-term covers legal fees and lawsuits and is valued according to management's best estimate.

Provision for warranty
Provisions for warranty-related costs are recognised when the product is sold or service provided. Initial recognition is based on historical experience. The initial estimate of warranty-related costs is revised annually.

36. DISCONTINUED OPERATIONS

In December 2021, the Group completed the sale of a building located in La Ciotat, France for an amount of kUSD 11 352. The building was retained upon the disposal of the SmarDTV operations in August 2018 and was previously classified as 'held for sale'. The loss on the sale of kUSD -1 089 has been presented as discontinued operations in the consolidated income statements.

37. RESEARCH AND DEVELOPMENT

The following amounts were recognized as expense and charged to the income statement:

In USD'000	2021	2020
Research and development	130 285	128 411

38. DIVIDEND

On April 22, 2021, the Group paid a distribution of CHF 0.10 per bearer share and CHF 0.01 per registered share. The distribution amounted to kUSD 6 080. Since year end, the Board of Directors have proposed a distribution of kUSD 6 056, representing CHF 0.10 per bearer share and CHF 0.01 per registered share respectively. The final distribution may fluctuate upon the issuance of additional share capital for employees by utilization of conditional share capital or utilization of authorized share capital for acquisitions. The proposal calls for the distribution of CHF 0.05 per bearer share (CHF 0.005 per registered share) from capital contribution reserves and CHF 0.05 per bearer share (CHF 0.005 per registered share) from retained earnings at December 31, 2021 and is subject to shareholder approval at the Annual General Meeting. This proposed distribution has not been recorded as a liability in the financial statements.

39. EMPLOYEE SHARE PARTICIPATION PLANS

EMPLOYEE SHARE PURCHASE PROGRAM (ESPP)

The Group has set up a plan to allow employees of certain Group companies preferential conditions to buy Kudelski SA bearer shares. All such shares purchased, and the additional shares obtained through this plan, are subject to a three-year blocking period.

	Shares 2021	Shares 2020
Shares underwritten by employees	39 815	42 810
Bonus shares from ESPP	7 963	8 562
Total employee share program	**47 778**	**51 372**
Amount paid by employee (In USD'000)	122	102
Booked corporate charges (excluding social charges) (In USD'000)	54	45
	176	**146**

SHARES ISSUED TO EMPLOYEES

In 2021, 316 594 (2020: 206 036) bearer shares of Kudelski SA were given to employees for no consideration as part of their compensation, of which 296 527 (2020: 132 836) include a seven-year blocking period, 7 567 (2020: 73 200) include a three-year blocking period and 12 500 (2020: 0) with no restriction to sale. The fair value recognized for this equity based compensation is kUSD 859 (2020: kUSD 915).

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40. RELATED PARTIES

Trading transactions

Transactions between the Group and its subsidiaries, which are related parties of the Group, have been eliminated in consolidation and are not disclosed in this note.

During the year, Group entities entered into the following significant trading transactions with related parties, associates or joint ventures that are not members of the Group:

In USD'000	Sale of goods and services 2021	2020	Purchase of goods and services 2021	2020	Amounts owed to related parties 31.12.2021	31.12.2020	Amounts owed by related parties 31.12.2021	31.12.2020
APT-Skidata Ltd	4 138	4 072	–	–	14	33	1 025	429
SKIDATA Parking System Ltd	1 226	1 304	–	–	–	–	104	81
SKIDATA India Private Limited	244	449	–	–	–	–	42	94
iWedia SA	–	–	–	–	–	–	–	–
Total associated companies	**5 608**	**5 825**	**–**	**–**	**14**	**33**	**1 172**	**604**
Audio Technology Switzerland SA	–	–	–	–	–	–	1 774	1 830
Total other related	**–**	**–**	**–**	**–**	**–**	**–**	**1 774**	**1 830**

APT SKIDATA, SKIDATA Parking System Ltd and SKIDATA India Private Limited are sales representative companies for SKIDATA Group. iWedia SA is a partner in providing middleware and other software components for digital TV solutions. Audio Technology Switzerland SA is considered as a related party as some Kudelski Board members invested in the company.

Services provided to/by associates and other related parties are performed at arm's length. The associates are listed in note 16. Outstanding balances are unsecured and are repayable in cash.

Key management compensation

Key management includes directors (executives and non-executives) and members of the Executive Committee. The compensation paid or payable to key management is shown below:

In USD'000	2021	2020
Salaries and other short-term employees benefits	9 711	8 693
Post-employments benefits	63	49
Share-based payments	601	501
	10 375	**9 242**

41. SHAREHOLDINGS AND LOANS

PRINCIPAL SHAREHOLDERS

	Voting rights		Shareholdings	
	31.12.2021	31.12.2020	31.12.2021	31.12.2020
Kudelski family pool	59%	59%	28%	28%
Kudelski family interests outside Kudelski family pool	4%	4%	7%	7%

The Kudelski family pool includes Mr. André Kudelski, Mrs. Marguerite Kudelski, Mrs. Isabelle Kudelski Haldy, Mrs. Irene Kudelski Mauroux and their respective descendants. The Kudelski family interests outside Kudelski family pool are two discretionary and irrevocable trusts of which the beneficiaries are family members of M. André Kudelski.

BOARD OF DIRECTORS AND MANAGEMENT

As of December 31, 2021 and 2020, the members of the Board of Directors and members of Group management had the following interest in the company (without including shares from 2021 and 2020 variable compensation - issued in 2021 and 2022 respectively):

	31.12.2021	31.12.2020
	Bearer shares	Bearer shares
Board of Directors		
Kudelski André, chairman (as member of the family pool)	10 782 923	10 662 923
Smadja Claude, vice chairman	1 300	1 300
Dassault Laurent, member	1 032 653	1 040 720
Foetisch Patrick, member	1 000	1 000
Kudelski Marguerite, (as member of the family pool)	see above	see above
Lescure Pierre, member	2 000	2 000
Ross Alec, member	1 250	1 250
Hengartner Michael, member	–	–
Total board members	**11 821 126**	**11 709 193**
Management		
Kudelski André, CEO	see above	see above
Saladini Mauro, CFO	184 323	156 851
Solbakken Morten, COO	72 248	47 265
Goldberg Nancy, CMO	39 265	14 846
Total Management (excluding CEO)	**295 836**	**218 962**

The Kudelski family pool also owns 46 300 000 registered shares of Kudelski SA as of December 31, 2021 and 2020.

No loans were granted in 2021 and 2020 to the members of the Board of Directors and Group management.

At December 31, 2021, Mauro Saladini owned kCHF 60 nominal value of the bond maturing in 2024.

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42. CATEGORIES OF FINANCIAL INSTRUMENTS

The financial assets and liabilities are classified as follow as of December 31, 2021:

Assets as per balance sheet date December 31, 2021 (in USD'000)	Note	Financial assets at fair value through profit or loss	Financial Assets at amortized costs	Total 31.12.2021
Financial assets and non-current assets:				
- equity instruments with no quoted market price (level 3)	18	1 152	–	1 152
- long-term loans	18	–	12 366	12 366
- state and government institutions	18	–	4 877	4 877
- trade accounts receivable - long-term portion	18	–	12 539	12 539
- guarantee deposits	18	–	1 878	1 878
- prepaid expenses and accrued income (long-term)	18	–	133	133
Trade accounts receivable	20	–	163 514	163 514
Other current assets:				
- state and government institutions	21	–	31 696	31 696
- other receivable (third and related parties)	21	–	12 479	12 479
Cash and cash equivalents	23	–	284 489	284 489
Derivative financial instruments (level 2)	34	699	–	699
		1 851	**523 971**	**525 822**

Liabilities as per balance sheet date December 31, 2021 (in USD'000)	Note	Financial liabilities at fair value through profit or loss	Financial Liabilities at amortized costs	Total 31.12.2021
Long-term financial debt	26	–	196 870	196 870
Long-term lease obligations	15	–	76 504	76 504
Other long-term liabilities:				
- deferred consideration	29	–	1 255	1 255
- contingent consideration (level 3)	29	1 255	–	1 255
- loans and others	29	–	6 046	6 046
Short-term financial debt	30	–	240 023	240 023
Short-term lease obligations	15	–	15 114	15 114
Trade accounts payable	31	–	68 586	68 586
Other current liabilities:				
- payable to pension fund	33	–	1 512	1 512
- other payables	33	–	23 317	23 317
- current income tax		–	2 684	2 684
Derivative financial instruments (level 2)	34	82	–	82
		1 337	**631 911**	**633 248**

And for 2020:

Assets as per balance sheet date December 31, 2020 (in USD'000)	Note	Financial assets at fair value through profit or loss	Financial Assets at amortized costs	Total 31.12.2020
Financial assets and non current assets:				
- equity instruments with no quoted market price (level 3)	18	1 188	–	1 188
- marketable securities (level 1)		994	–	994
- long-term loans	18	–	12 572	12 572
- state and government institutions	18	–	7 681	7 681
- trade accounts receivable - long-term portion	18	–	18 257	18 257
- guarantee deposits	18	–	2 275	2 275
- prepaid expenses and accrued income (long-term)	18	–	32	32
Trade accounts receivable	20	–	184 476	184 476
Other current assets:				
- state and government institutions	21	–	38 987	38 987
- other receivable (third and related parties)	21	–	12 984	12 984
Cash and cash equivalents	23	–	152 584	152 584
		2 182	429 848	432 030

Liabilities as per balance sheet date December 31, 2020 (in USD'000)	Note	Financial liabilities at fair value through profit or loss	Financial Liabilities at amortized costs	Total 31.12.2020
Long-term financial debt	26	–	439 192	439 192
Long-term lease obligations	15	–	29 599	29 599
Other long-term liabilities:				
- deferred consideration	29	–	1 484	1 484
- contingent consideration (level 3)	29	1 484	–	1 484
- loans and others	29	–	5 820	5 820
Short-term financial debt	30	–	48 212	48 212
Short-term lease obligations	15	–	13 720	13 720
Trade accounts payable	31	–	67 732	67 732
Other current liabilities:				
- payable to pension fund	33	–	1 757	1 757
- other payables	33	–	24 395	24 395
- current income tax		–	4 383	4 383
		1 484	636 293	637 778

43. FAIR VALUE OF FINANCIAL INSTRUMENTS

IFRS requires disclosure of fair value measurement by level according to the following fair value measurement hierarchy:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (as prices) or indirectly (derived from prices)
- Level 3: inputs for the assets or liabilities that are not based on observable market data (unobservable inputs)

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The table below illustrates the three hierarchical levels for valuing financial instruments carried at fair value as of December 31, 2021 and 2020:

In USD'000		Note	31.12.2021	31.12.2020
Financial assets at fair value through comprehensive income:				
- marketable securities	Level 1	18	–	994
- equity instuments with no quoted market price	Level 3	18	1 152	1 188
Total financial assets			**1 152**	**2 182**
Financial liabilities:				
- contingent consideration (long-term portion)	Level 3	29	1 255	1 484
Total financial liabilities			**1 255**	**1 484**

The fair value of Level 3 equity instruments with no quoted market price is determined using a discounted cash flow method provided by the company. Level 3 contingent consideration consists of earn-out payments on companies that have been acquired. The fair value is measured using projections reviewed by management and discount rate of 10.0% (2020: 10.0%).

RECONCILIATION OF LEVEL 3 FAIR VALUES:

The following table shows a reconciliation for the level 3 fair values:

In USD'000	Equity instruments with no quoted market price	Contingent liabilities
Balance at January 1, 2020	517	-2 240
Settlements	-533	344
Remeasurement (recognized in other operating income)	–	443
Remeasurement (recognized in other finance income/(expense), net)	48	
Reclassification	1 073	–
Currency translation adjustment	84	-32
Balance at December 31, 2020	**1 188**	**-1 484**
Exchange difference	–	-18
Currency translation adjustment	-36	247
Balance at December 31, 2021	**1 152**	**-1 255**

Reclassification relates to an investment in an associated company whereby the Group no longer has significant influence and accounts for the financial asset at fair value through profit or loss.

Except as detailed in the following table, management considers that the carrying amounts of financial assets and financial liabilities recorded at amortized cost in the financial statements approximate their fair values:

In USD'000	Carrying amount 2021	Fair value 2021	Carrying amount 2020	Fair value 2020
Financial liabilities				
- CHF 200 million bond	202 117	200 795	225 770	183 049
- CHF 150 million bond	161 518	148 822	169 137	106 020

The fair values of the bonds are based on their market prices as of December 31. Limited trading liquidity results in material volatility of such prices.

44. MATURITY ANALYSIS FOR FINANCIAL LIABILITIES

The following table analyses the Group's remaining contractual maturities for its non-derivative financial liabilities. The table is based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The table below includes both interest and principal cash flows. The adjustment columns represent the possible future cash flows attributable to the instrument included in the maturity analysis which are not included in the carrying amount of the financial liability on the balance sheet. Balances due within one year equal their carrying amounts as the impact of discounting is not significant.

In USD'000	Due within 1 year	Due within 1 year	Due > 1 year < 5 years	Due > 1 year < 5 years	Due > 5 years	Due > 5 years	Adjust-ment	Adjust-ment	Total book value	Total book value
	2021	2020	2021	2020	2021	2020	2021	2020	2021	2020
Bonds	208 465	6 819	166 665	407 458	–	–	-11 494	-19 370	363 635	394 907
Long-term bank loans	–	–	34 063	46 467	3 765	–	-2 477	-2 182	35 352	44 285
Short-term financial debt	37 603	48 160	–	–	–	–	-362	-557	37 241	47 602
Trade accounts payable	68 586	67 732	–	–	–	–	–	–	68 586	67 732
Other payables	23 317	24 395	–	–	–	–	–	–	23 317	24 395
Total	**337 971**	**147 106**	**200 728**	**453 925**	**3 765**	**–**	**-14 333**	**-22 109**	**528 131**	**578 922**

45. SENSITIVITY ANALYSIS

Foreign currency

The Group undertakes certain transactions denominated in foreign currencies. Hence, exposure to exchange rate fluctuations arises. Exchange rate exposures are managed within approved policy parameters utilizing derivative instruments.

The Group is mainly exposed to the CHF and the EUR. The following table details the Group's sensitivity to a 10% (2020: 10%) increase and decrease in the CHF and a 10% (2020: 10%) increase or decrease in the EUR compared to the presentation currency. The sensitivity rate used approximates the fluctuation considered by management when performing risk analysis. The sensitivity analysis includes only outstanding foreign currency-denominated monetary items and adjusts their translation at period end for the above mentioned change in foreign currency rates. The sensitivity analysis includes external loans as well as loans to foreign operations within the Group where the denomination of the loan is in a currency other than the currency of the lender or the borrower. A positive number indicates an increase in post-tax profit when the foreign currency strengthens against the relevant currency.

	CHF		EUR	
In USD'000	**2021**	**2020**	**2021**	**2020**
Post-tax net income				
- Increase	214	-7 699	-1 850	-1 205
- Decrease	-1 266	7 699	1 850	1 205
Comprehensive income (post-tax effect)				
- Increase	-17 094	-16 422	3 639	3 368
- Decrease	15 616	16 422	-3 639	-3 368

Interest rates

The sensitivity analysis aims to disclose the impact of a market change in interest rates. The sensitivity analysis below is based on the exposure to interest rates for financial instruments at the balance sheet date and the stipulated change taking place at the beginning of the financial year and held constant throughout the reporting period in the case of financial instruments that have floating rates. The actual interest rate situation in Europe (specifically for CHF and EUR rates) is characterized by negative risk-free interest rates for the past several years. As most of our floating rate loan agreements include a floor of 0% (i.e. banks are not granting the negative points as a deduction of the borrowing rate), the impact of an interest rate increase or decrease is significantly reduced for currencies with negative interest rates, thus reducing the sensitivity to a change in market rates. As the actual market interest rate on the USD is close to zero, a similar impact applies to the sensitivity when applying a decrease on the market interest rate.

The following rates, corresponding to each currency, represent management's assessment of the reasonable possible change in interest rates for purposes of reporting interest rate sensitivity. Prior year sensitivity has been re-presented for comparison

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2021

purposes:
- USD: increase of 100 basis points and decrease of 100 basis points (2020: 100 basis points increase or 100 decrease)
- EUR: increase of 100 basis points and decrease of 100 basis points (2020: 100 basis points increase or 100 decrease)
- CHF: increase of 100 basis points and decrease of 100 basis points (2020: 100 basis points increase or 100 decrease)

If interest rates had been higher/lower on the above mentioned possible change in interest rates and all other variables were held constant, the Group's:
- post-tax profit for the year ended December 31, 2021 would increase by kUSD 919 and decrease by kUSD 78, respectively. (2020: increase by kUSD 464 and decrease by kUSD 82). This is mainly due to the interest rate exposure on cash balances.
- other comprehensive income would not be impacted in 2021 and 2020.

Equity prices
The Group is not materially exposed to any equity price fluctuation.

46. COLLATERAL RECEIVED AND GIVEN

In USD'000	31.12.2021	31.12.2020
Guarantees in favor of third parties	11 775	21 636

47. RISK CONCENTRATION
At December 31, 2021 and 2020, no financial asset exposure was more than 10% of the financial assets.

48. FINANCIAL INSTRUMENTS - UNREPRESENTATIVE RISK EXPOSURE AT REPORTING DATE
The quantative data required for IFRS 7 disclosures encompassing market, credit and liquidity risk for the year ended December 31, 2021 was representative of the Group risk profile at that date and is determined by Group management to be representative for future periods.

49. CAPITAL RISK MANAGEMENT
The Group's capital management focus is to maintain a sound capital base to support the continued development of its business. The Group is not subject to externally imposed capital requirements.

The Board of Directors seeks to maintain a prudent balance between different components of the Group's capital. Group management monitors capital on the basis of operating cash flow as a percentage of net financial debt. Net financial debt is defined as current and non-current financial liabilities less liquid assets.

The operating cash flow to net financial debt ratio as at December 31, 2021 was 67.7% (2020: 39.6%).

2021 operating cash flow was positive USD 103.1 million (2020: USD 132.6 million) mainly reflecting USD 72.4 million Operating income before depreciation, amortization and impairment as well as continued reduction of working capital.

50. NET DEBT RECONCILIATION

In USD'000	31.12.2021	31.12.2020
Cash and cash equivalents	284 489	152 584
Long-term financial debt	-196 870	-439 192
Long-term lease obligations	-76 504	-29 599
Short-term financial debt	-240 023	-48 212
Short-term lease obligations	-15 114	-13 720
Net debt	**-244 022**	**-378 137**

In USD'000	Note:	Cash and cash equivalents	Long-term debt	Short-term debt	Lease obligations	Total
Net debt at January 1, 2020		**74 596**	**-393 029**	**-73 679**	**-44 039**	**-436 151**
Cash flows		71 415	–	–		71 415
Lease addition		–	–	–	-16 937	-16 937
Reimbursment of bank overdrafts, long-term loans		–	11 417	73 503	18 115	103 035
Increase in bank overdrafts, long-term loans		–	-21 643	-43 315	–	-64 958
Covid 19 subsidies		–	1 449	–	–	1 449
Termination of leasing contracts		–	–	–	2 775	2 775
Accrued interests		–	–	-96	-1 422	-1 517
Foreign exchange adjustments		6 573	-37 159	-4 625	-1 811	-37 022
Amortization of transaction cost less premium	27	–	-227	–	–	-227
Net debt at December 31, 2020		**152 584**	**-439 192**	**-48 212**	**-43 318**	**-378 138**
Cash flows		139 874	–	–	–	139 874
Reclassification		–	200 252	-200 252	–	–
Lease addition		–	–	–	-64 847	-64 847
Reimbursment of bank overdrafts, long-term loans and lease obligations		–	26 641	8 507	16 011	51 159
Increase in bank overdrafts, long-term loans		–	–	-2 338	–	-2 338
Covid 19 subsidies		–	339	–	–	339
Termination of leasing contracts		–	–	–	725	725
Accrued interests		–	–	-74	-1 259	-1 333
Foreign exchange adjustments		-7 969	14 618	2 346	1 070	10 065
Amortization of transaction cost less premium and gain on bond repurchase	27	–	472	–	–	472
Net debt at December 31, 2021		**284 489**	**-196 870**	**-240 023**	**-91 618**	**-244 022**

51. EVENTS OCCURRING AFTER THE REPORTING PERIOD

The group is not aware of any significant events occuring after the reporting period that could have a material impact on the Group financial statements.

52. PRINCIPAL CURRENCY TRANSLATION RATES

	Year end rates used for the consolidated balance sheets		Average rates used for the consolidated income and cash flow statements	
	2021	**2020**	**2021**	**2020**
1 CHF	1.0953	1.1299	1.0938	1.0654
1 EUR	1.1336	1.2226	1.1825	1.1404
100 CNY	15.7393	15.3107	15.5025	14.4938
100 NOK	11.3428	11.6452	11.6378	10.6496
1 GBP	1.3505	1.3661	1.3756	1.2830
100 BRL	17.9628	19.2090	18.5546	19.6069
100 INR	1.3439	1.3672	1.3522	1.3494
1 SGD	0.7415	0.7559	0.7442	0.7250
100 ZAR	6.2432	6.7797	6.7697	6.1109
100 RUB	1.3297	1.3480	1.3572	1.3917
1 AUD	0.7262	0.7695	0.7511	0.6899

53. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Board of Directors and authorised for issuance on February 22, 2022.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2021

54. PRINCIPAL OPERATING COMPANIES

Company	Place of incorporation	Activity	Digital TV	Cyber-security	Internet of Things	Public Access	Corporate	Percentage held 2021	2020
Nagravision SA	CH – Cheseaux	Solutions for Digital TV and Cybersecurity	•	•	•			100	100
Nagra France SAS	FR – Paris	Solutions for Digital TV	•					100	100
Nagra USA, LLC	US – New York	Sales and support	•		•			100	100
Nagravision Asia Pte Ltd	SG – Singapore	Services	•					100	100
NagraStar LLC	US – Englewood	Smartcards and digital TV support	•					50	50
OpenTV Inc	US – Delaware	Middleware for set-top-boxes and IoT solutions	•		•			100	100
Nagravision AS	NO – Oslo	Solutions for Digital TV	•					100	100
Kudelski Security, Inc.	US – Minneapolis	Cybersecurity Solutions		•				100	100
SKIDATA Group	AT – Gartenau	People and car access systems				•		100	100
Kudelski SA	CH – Cheseaux	Holding, parent company of the Group					•	100	100
Kudelski Corporate, Inc.	US – Delaware	Support					•	100	100

These principal companies are all subsidiaries.

55. RISK ASSESSMENT DISCLOSURES REQUIRED BY SWISS LAW

REQUIRED BY SWISS LAW

Risk assessment and management is an integral part of the Group-wide enterprise risk management. The risk management approach is structured around a global risk assessment and management, and financial risk management. Both are governed by policies initiated by the Board of Directors. The internal control system is based on the COSO framework with a dedicated internal control team in place.

Global risk management

The global risk management process led to the identification and management of security, operational, strategic, asset and market risks. Daily management of the global risks is performed and monitored by the executive management. Risks related to market dynamics include foreign exchange movements, interest rate changes and financing risks. They are described in more detail in section 3 of this report.

Financial Risk Management

The major financial risks consist of accounting complexity and the control environment. Risks related to the control environment include information systems complexity, timely review of results and the robustness of the documentation of processes. Executive management continues to address these risks with process documentation initiatives as well as establishment of process and entity level controls. Financial risk management is described in more details in note 3.

The most critical accounting policies to address accounting complexity include revenue recognition, accounting for acquisitions and strategic alliances, intangible assets and impairments, tax provisions, equity based compensation and contingencies.

Kudelski SA

Cheseaux-sur-Lausanne

Report of the statutory auditor
to the General Meeting

on the consolidated financial statements 2021

pwc

Report of the statutory auditor

to the General Meeting of Kudelski SA

Cheseaux-sur-Lausanne

Report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of Kudelski SA and its subsidiaries (the Group), which comprise the consolidated income statements and consolidated statements of comprehensive income for the year ended, 31 December 2021, the consolidated balance sheets as at 31 December 2021, the consolidated cash flow statements, consolidated statement of changes in equity for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies.

In our opinion, the consolidated financial statements (pages 108 to 160) give a true and fair view of the consolidated financial position of the Group as at 31 December 2021 and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with the International Financial Reporting Standards (IFRS) and comply with Swiss law.

Basis for opinion

We conducted our audit in accordance with Swiss law, International Standards on Auditing (ISAs) and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the consolidated financial statements" section of our report.

We are independent of the Group in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession, as well as the International Code of Ethics for Professional Accountants (including International Independence Standards) of the International Ethics Standards Board for Accountants (IESBA Code), and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview

Overall Group materiality: USD 3'355'000

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

As key audit matter the following area of focus has been identified:

Goodwill impairment Cybersecurity and Internet of Things

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Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the consolidated financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the consolidated financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall Group materiality for the consolidated financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the consolidated financial statements as a whole.

Overall Group materiality	USD 3'355'000
Benchmark applied	Total revenues
Rationale for the materiality benchmark applied	We have chosen revenue as a benchmark for determining materiality, as it represents an important characteristic and Kudelski Group had volatile results in the past.

We agreed with the Audit Committee that we would report to them misstatements above USD 330'000 identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Audit scope

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the consolidated financial statements as a whole, taking into account the structure of the Group, the accounting processes and controls, and the industry in which the Group operates.

The Group financial statements are a consolidation of 62 reporting components. Following our assessment of the risk of material misstatement to the Group's consolidated financial statements and considering the significance of the reporting components' business operations relative to the Group, we selected 7 reporting components which represent the principal business operations of the Group. 6 of the reporting components were subject to an audit of complete financial information and 1 entity was subject to specified audit procedures. For the remaining reporting components, we performed other procedures to test or assess that there were no significant risks of material misstatement in relation to the Group's consolidated financial statements.

The Group audit team, in addition to the audit of the consolidation, was directly responsible for auditing 3 of the 6 reporting components which were subject to a full audit. For the other reporting components, the Group audit team directed and supervised the audit work performed by the PwC component teams at all stages of the audit

Key audit matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Goodwill impairment Cybersecurity and Internet of Things

Key audit matter	How our audit addressed the key audit matter
As described in Note 14 to the consolidated financial statements, the Group has Goodwill totaling USD 351.0 million at 31 December 2021, comprising USD 64.9 million related to the Cybersecurity segment and USD 35.8 million related to the Internet of Things segment.	We assessed the Group's allocation of goodwill to the CGUs Cybersecurity and Internet of Things by assessing the reasonableness of the CGUs taking into consideration management reporting and that CGU's for goodwill impairment testing purposes are not larger than any of the Group's operating segments.

We focused on the Goodwill related to Cybersecurity and IoT in view of the significance of the amounts involved, the business segments' operating performance during 2021 and the judgement used by management about future results. The assessment of the carrying value of the goodwill balances is highly dependent on management's estimate of the future cash flows expected to arise from the cash-generating unit and a suitable discount rate. Refer to note 2 – Critical accounting estimates and judgements and note 14 – Intangible assets for details of management's impairment test and assumptions.	We obtained the Group's impairment analysis for CGUs Cybersecurity and Internet of Things and performed the following procedures: - Tested the mathematical accuracy of the model and traced amounts to underlying financial statement and other information, as applicable. - Assessed the quality of the cash flow projections by comparing the actual results to prior year budget to identify in retrospect whether any of the assumptions might have been too optimistic. - Reconciled the 5 year projections to the budget that was subject to scrutiny and approval by the Board of Directors and gained an understanding of the process undertaken to develop the projections. - We reviewed with management to substantiate its key assumptions in the cash flow projections during the forecast period and its intention and ability to execute their strategic initiatives. - We tested, with the support of our valuation specialists, the reasonableness of the cash flows growth rate after the forecast period assumption of 2.2% for both the Cybersecurity and Internet of Things divisions. - Together with our specialists, we evaluated the reasonableness of the discount rate of 8.75% applied for Cybersecurity and 8.5% for Internet of Things to those future cash flows. We obtained the Group's sensitivity analyses around key assumptions to ascertain the effect of reasonably possible changes to those assumptions on the value in use estimates and re-calculated the sensitivity. We reviewed and validated disclosures regarding Goodwill and intangible assets in the Group's financial statements. On the basis of the audit evidence obtained, we consider the valuation method and the assumptions used by the Group to be reasonable and appropriate for the impairment testing of goodwill.

Other information in the annual report

The Board of Directors is responsible for the other information in the annual report. The other information comprises all information included in the annual report, but does not include the consolidated financial statements, the stand-alone financial statements and the remuneration report of Kudelski SA and our auditor's reports thereon.

Our opinion on the consolidated financial statements does not cover the other information in the annual report and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information in the annual report and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors for the consolidated financial statements

The Board of Directors is responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with IFRS and the provisions of Swiss law, and for such internal control as the Board of Directors determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the Board of Directors is responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the consolidated financial statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law, ISAs and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with Swiss law, ISAs and Swiss Auditing Standards, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of consolidated financial statements according to the instructions of the Board of Directors.

We recommend that the consolidated financial statements submitted to you be approved.

PricewaterhouseCoopers SA

Luc Schulthess	Nicolas Daehler
Audit expert Auditor in charge	Audit expert

Lausanne, 22 February 2022

BALANCE SHEETS AT DECEMBER 31, 2021 AND 2020

ASSETS

In CHF'000	Notes	31.12.2021	31.12.2020
Current assets			
Cash and cash equivalents		2 085	12 618
Accounts receivable from Group companies		65 193	70 323
Other current receivables and prepaid expenses	3.1	659	649
Total current assets		**67 937**	**83 590**
Fixed assets			
Loans to Group companies		308 617	460 493
Loan to third party		791	949
Investments	3.2	624 648	459 423
Total fixed assets		**934 056**	**920 865**
Total assets		**1 001 993**	**1 004 455**

SHAREHOLDERS' EQUITY AND LIABILITIES

In CHF'000	Notes	31.12.2021	31.12.2020
Short-term liabilities			
Short-term interest-bearing liabilities :			
- Bank, short-term borrowings		8 000	10 000
- Bonds	3.3	184 600	–
Other short-term liabilities :			
- due to third parties		529	280
- due to Group companies		27 989	27 551
Accrued expenses		1 939	1 945
Short term provisions	3.4	8 179	–
Total short-term liabilities		**231 236**	**39 776**
Long-term liabilities			
Long-term interest-bearing liabilities :			
- Bonds	3.3	147 690	350 000
Total long-term liabilities		**147 690**	**350 000**
Total liabilities		**378 926**	**389 776**
Shareholders' equity			
Share capital		442 936	440 021
Legal reserves:			
- from retained earnings		90 000	110 000
- from capital contribution		68 702	71 467
Retained earnings		10 425	22 035
Net (loss) / income		11 004	-28 845
Total shareholders' equity	**3.5**	**623 067**	**614 679**
Total liabilities and shareholders' equity		**1 001 993**	**1 004 455**

INCOME STATEMENTS AND PROPOSAL FOR APPROPRIATION OF AVAILABLE EARNINGS FOR THE YEAR 2021

INCOME STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2021 AND 2020

In CHF'000	Notes	2021	2020
Other non operating income		507	105
Financial income	4.1	20 084	20 819
Gain on sale of investments		752	296
Administrative and other expenses		-2 917	-2 662
Financial expenses and exchange result	4.2	-6 485	-33 322
Impairment of financial fixed assets	4.3	–	-13 638
Income/(loss) before tax		**11 941**	**-28 402**
Direct taxes (other than income tax)		-937	-443
Net income/(loss)		**11 004**	**-28 845**

PROPOSAL FOR APPROPRIATION OF AVAILABLE EARNINGS FOR THE YEAR 2020

In CHF'000	Legal reserves from capital contribu- tion	Retained earnings
Balance brought forward from previous year	71 467	-6 810
Partial dissolution of the legal reserves from retained earnings	–	20 000
Dividend	-2 765	-2 765
Net result	–	11 004
Total available earnings	**68 702**	**21 429**
Proposal of the Board of Directors:		
Ordinary distribution:		
- CHF 0.10 on 50'736'972* bearer shares (of which CHF 0.05 out of capital contribution reserve and CHF 0.05 out of retained earnings)	-2 537	-2 537
- CHF 0.01 on 46'300'000 registered shares (of which CHF 0.005 out of capital contribution reserve and CHF 0.005 out of retained earnings)	-232	-232
Balance to be carried forward	**65 933**	**18 660**

*This figure represents the number of bearer shares which are dividend bearing as of December 31, 2021 and may fluctuate upon issuance of additional share capital for the employees by utilization of the conditional share capital or utilization of the authorized share capital to acquire companies.

NOTES TO THE FINANCIAL STATEMENTS 2021

1. INTRODUCTION

Kudelski SA, with registered office in Cheseaux, is the ultimate holding company of the Kudelski Group, which comprises subsidiaries and associated companies.

2. ACCOUNTING POLICIES

BASIS OF PREPARATION

The financial statements of Kudelski SA, comply with the requirements of the Swiss accounting legislation of the Swiss Code of Obligations (SCO).

These financial statements were prepared under the historical cost convention and on an accrual basis.

Kudelski SA is presenting consolidated financial statements according to IFRS. As a result, these financial statements and notes do not include additional disclosures, cash flow statement and management report.

FINANCIAL ASSETS

Investments and loans are initially recognized at cost. They are assessed annually and in case of an impairment adjusted to their recoverable amount within their category.

Investments and loans are allocated to four buckets for impairment testing. The four buckets are the cash generating units, which are defined within the framework of the Group as the operating segments; Digital TV, Cybersecurity, Internet of Things (IoT) and Public Access.

The recoverable amount of the cash generating units (CGUs) was determined based on value-in-use calculations. The calculations use cash flow projections approved by management covering a five-year period. Cash flows beyond the five-year period are extrapolated using estimated growth rates in perpetuity.

CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash at bank and short-term deposits. Cash at bank consists of all funds in current accounts available within 48 hours. Short-term deposits generally include bank deposits and fixed term investments whose maturities are of three months or less from the transaction date.

EXCHANGE RATE DIFFERENCES

Transactions in foreign currencies are accounted for in Swiss francs (CHF) at the exchange rate prevailing at the date of the transaction. Assets and liabilities in foreign currencies are accounted for at year-end rates.

Any resulting exchange differences are included in the respective income statement caption depending upon the nature of the underlying transactions; the aggregate unrealized exchange difference is calculated by reference to original transaction date exchange rates and includes hedging transactions. Where this gives rise to a net loss, it is charged to the income statement, while net gains are deferred.

NOTES TO THE FINANCIAL STATEMENTS 2021

3. NOTES TO THE BALANCE SHEETS

3.1 OTHER CURRENT RECEIVABLES AND PREPAID EXPENSES

In CHF'000	31.12.2021	31.12.2020
Prepaid expenses	334	578
Withholding tax	–	69
Other accounts receivable	325	2
	659	**649**

Prepaid expenses mainly includes the amortized cost of the difference between nominal value and net proceeds less issuance costs of the bonds (note 3.3). These amounts are allocated against income statement over the contractual periods of their underlying borrowings.

3.2 INVESTMENTS

DIRECT INVESTMENTS

Company	Location	Activity	Share capital		Percentage held and voting rights 2021	2020
Nagravision Sàrl	CH – Cheseaux	Solutions for Digital TV	kCHF	20 000	100	100
Nagravision Iberica SL	ES – Madrid	Sales and support Digital TV	kEUR	3	100	100
Nagra France SAS	FR – Paris	Solutions for Digital TV	kEUR	10 472	100	100
Nagra Media Germany GmbH	DE – Ismaning	Services	kEUR	25	100	100
Kudelski Corporate Inc.	US – Phoenix	Holding	kUSD	0	100	100
SKIDATA GmbH	AT - Salzburg	Public access	kEUR	3 634	100	100
Nagra Plus SA in liquidation	CH – Cheseaux	Analog Pay-TV solutions	kCHF	100	100	50
SmarDTV SA	CH – Cheseaux	Conditional access modules and set-top-boxes	kCHF	1 000	100	100
Kud SA	LU – Luxembourg	Finance	kCHF	100	100	100
Leman Consulting SA in liquidation	CH – Nyon	Intellectual property consulting	kCHF	0	L	100
Nagravision Asia Pte Ltd	SG – Singapore	Services	kSGD	100	100	100
Nagra Media UK Ltd	UK – London	Research & development	KGBP	1 000	100	100
Nagravision Italy Srl	IT – Bolzano	Sales and support	kEUR	10	100	100
Nagra Travel Sàrl	CH – Cheseaux	Travel agency	kCHF	50	100	100
Nagravision India Pvt Ltd	IN – Bangalore	Research & development	kINR	100	100	100
Acetel Co Ltd	SK – Séoul	Digital broadcasting solution provider	kKRW	1 460	17	17
Nagra Media Private Limited	IN - Mumbai	Sales and support	kINR	0	M	100
Nagra Media Beijing Co. Ltd	CN - Beijing	R & D, Sales and services	KCNY	9 032	100	100
Nagra Media Korea LLC	KR - Anyang	Sales and support	kKRW	200 000	100	100
Nagra Media Brasil LTDA	BR - São Paulo	Sales and support	kBRL	1 000	100	100
Nagra Media (Taiwan) Co., Ltd	TW - Taipei	Sales and support	kNTD	500	100	100
Nagravision AS	NO - Oslo	Solutions for Digital TV	kNOK	1 111	100	100
iWedia SA	CH - Lausanne	Solutions for Digital TV	kCHF	750	40	40
Kryptus Segurança da Informaçao Ltda.	BR - Sao Paulo	Cyber Security Solutions	kBRL	475	10	10
E.D.S.I. SAS	FR - Cesson Sévigné	Research & development	KEUR	163	100	100
Nagra Media Australia Pty Ltd	AU - New South Wales	Sales and support	kAUD	50	100	100
NexGuard Labs B.V.	NL - Eindhoven	Watermarking Solutions	kEUR	25	100	100
NexGuard Labs France SAS	FR - Cesson Sevigne	Watermarking Solutions	kEUR	420	100	100

M: Merged companies
L: Liquidated companies

SIGNIFICANT INDIRECT INVESTMENTS

Company	Location	Activity	Share capital		Percentage held and voting rights 2021	2020
Nagra USA, LLC	US – Phoenix	Services, sales and support	kUSD	10	100	100
OpenTV Inc.	US - Delaware	Middleware for set-top-boxes	kUSD	112 887	100	100
NagraStar LLC	US – Englewood	Smartcards and digital TV support	kUSD	2 043	50	50
Kudelski Security Inc.	US - Minneapolis	Cyber Security Solutions	kUSD	0	100	100
SKIDATA Benelux BV	NL – Barenbrecht	Public access	kEUR	90.6	100	100
SKIDATA (Schweiz) AG	CH - Adliswil	Public access	kCHF	150	100	100
SKIDATA Inc.	US – Van Nuys	Public access	kUSD	5 510	100	100
SKIDATA Australasia Pty Ltd	AU – Melbourne	Public access	kAUD	5 472	100	100

3.3 BONDS

In CHF'000	2021
Initial balance	**350 000**
Repurchase	-17 710
Liability component as of December 31	**332 290**
of which:	
- short-term portion (bond 2015/2022)	184 600
- long-term portion (bond 2016/2024)	147 690
	332 290

On May 12, 2016 the company issued a CHF 200 million bond with a subscription price of 100%, bearing an interest rate of 1.875% and maturing on August 12, 2022 with denominations of CHF 5 000 and multiples thereof. The Company repurchased kCHF 15 400 in nominal value of this bond in 2021.

On September 27, 2016 the company also issued a CHF 150 million bond with a subscription price of 100%, bearing an interest rate of 1.5% and maturing on September 27, 2024 with denominations of CHF 5 000 and multiples thereof. The Company repurchased kCHF 2 310 in nominal value of this bond in 2021.

Each bond is measured at its nominal value. The initial difference between nominal value and net proceeds less issuance costs is considered as a prepaid expense and allocated against the income statement over the period of the bond.

3.4 SHORT TERM PROVISIONS

The short-term provisions consists in an unrealized exchange gains in foreign currencies for kCHF 8 179 (2020: kCHF 0).

NOTES TO THE FINANCIAL STATEMENTS 2021

3.5 CHANGE IN SHAREHOLDERS' EQUITY

In CHF'000	Share capital	Legal reserves from retained earnings	Legal reserves from capital contribution	Retained earnings	Total Shareholders' equity
As of December 31, 2019	**437 961**	**110 000**	**74 216**	**24 785**	**646 962**
Dividend	–	–	-2 749	-2 749	-5 498
Share capital increase	2 060	–	–	–	2 060
Net Income	–	–	–	-28 845	-28 845
As of December 31, 2020	**440 021**	**110 000**	**71 467**	**-6 809**	**614 679**
Partial dissolution of the legal reserves from retained earnings		-20 000		20 000	–
Dividend	–	–	-2 765	-2 766	-5 531
Share capital increase	2 915	–	–	–	2 915
Net Income	–	–	–	11 004	11 004
As of December 31, 2021	**442 936**	**90 000**	**68 702**	**21 429**	**623 067**

SHARE CAPITAL

In CHF'000	31.12.2021	31.12.2020
50'736'972 / 50'372'600 bearer shares, at CHF 8 each	405 896	402 981
46'300'000 registered shares, at CHF 0.80 each	37 040	37 040
	442 936	**440 021**

The registered shares are neither listed nor traded on any stock exchange. The bearer shares have been listed on the main market of the SIX since 2 August 1999 (ticker: KUD, security number: 1 226 836; ISIN CH0012268360).

CONDITIONAL SHARE CAPITAL (ARTICLE 6 OF ARTICLES OF INCORPORATION)

In CHF'000	2021	2020
Conditional share capital as of January 1	83 529	85 588
Increase of conditional share capital	4 000	–
Employee share purchase plan	-382	-411
Shares allotted to employees	-2 533	-1 648
Conditional share capital at December 31	**84 614**	**83 529**
Of which may be utilized as of December 31 for:		
- Convertible bonds:		
10'000'000 bearer shares, at CHF 8 each	80 000	80 000
- Options or share subscriptions to employees:		
576'784 / 441'156 bearer shares, at CHF 8 each	4 614	3 529
	84 614	**83 529**

AUTHORIZED SHARE CAPITAL (ARTICLE 7 OF ARTICLES OF INCORPORATION)

In CHF'000	31.12.2021	31.12.2020
3'768'164 bearer shares, at CHF 8 each	30 145	30 145
3'200'000 registered shares, at CHF 0.80 each	2 560	2 560
Authorized share capital as of December 31	**32 705**	**32 705**

The Board of Directors is authorized to increase the share capital in one or more stages until April 15, 2022, for the purpose of acquiring companies or parts of companies.

MAJOR SHAREHOLDERS

	Voting rights 31.12.2021	Voting rights 31.12.2020	Shareholdings 31.12.2021	Shareholdings 31.12.2020
Kudelski family pool	59%	59%	28%	28%
Kudelski family interests outside Kudelski family pool	4%	4%	7%	7%

The Kudelski family pool includes André Kudelski, Marguerite Kudelski, Isabelle Kudelski Haldy, Irene Kudelski Mauroux and their respective descendants. The Kudelski family interests outside Kudelski family pool are two discretionary and irrevocable trusts of which the beneficiaries are family members of André Kudelski.

4. NOTES TO THE INCOME STATEMENTS

4.1 FINANCIAL INCOME

In CHF'000	2021	2020
Dividends received from Group subsidiaries	15 421	16 573
Interest on loans to Group subsidiaries	4 029	4 246
Gain on bonds repurchase	634	–
	20 084	**20 819**

4.2 FINANCIAL EXPENSES AND EXCHANGE RESULTS

In CHF'000	2021	2020
Net currency exchange result	52	-26 528
Interest on loans from Group subsidiaries	-362	-230
Interest expenses and bank charges	-6 175	-6 564
	-6 485	**-33 322**

4.3 IMPAIRMENT OF FINANCIAL FIXED ASSETS

In CHF'000	2021	2020
Change in provision on Group investments and loans	–	-9 642
Value adjustment on investments	–	-3 996
	–	**-13 638**

In 2020, the change in provision on Group investments relates to capital contributions (stabilization measures) of kCHF 12 230 and a reduction on an intercompany loan provision of kCHF 2 588.

NOTES TO THE FINANCIAL STATEMENTS 2021

5. COMMITMENTS AND CONTINGENCIES

In CHF'000	31.12.2021	31.12.2020
Guarantee commitments		
Commitment in favor of third parties and Group companies	3 419	1 015
Other commitments		
Penalty risk for non-completion of contracts	p.m.	p.m.
Subordinated loans in favor of Group companies	p.m.	p.m.
Support letters and guarantees signed in favor of Group companies	p.m.	p.m.
Jointly responsible for VAT liabilities of Swiss subsidiaries (VAT Group)	p.m.	p.m.

6. FULL-TIME EQUIVALENTS

The annual average number of full-time equivalents for 2021 and 2020 did not exceed ten people.

7. BOARD AND EXECUTIVE INTEREST DISCLOSURES

The disclosures required by article 663c of Swiss Code of Obligations on Board and Executive interest are shown in the Kudelski Group consolidated financial statements.

Kudelski SA

Cheseaux-sur-Lausanne

Report of the statutory auditor
to the General Meeting

on the financial statements 2021

pwc

Report of the statutory auditor

to the General Meeting of Kudelski SA

Cheseaux-sur-Lausanne

Report on the audit of the financial statements

Opinion

We have audited the financial statements of Kudelski SA, which comprise the balance sheet as at 31 December 2021, income statement and notes for the year then ended, including a summary of significant accounting policies.

In our opinion, the financial statements (pages 166 to 174) as at 31 December 2021 comply with Swiss law and the company's articles of incorporation.

Basis for opinion

We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report.

We are independent of the entity in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview

Overall materiality: CHF 10'000'000

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the entity, the accounting processes and controls, and the industry in which the entity operates.

As key audit matter the following area of focus has been identified:

Valuation of investments in subsidiaries and loans to Group companies

Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the financial statements are free from material misstatement. Misstatements may arise due to fraud or

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error. They are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall materiality for the financial statements as a whole as set out in the table below. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements, both individually and in aggregate, on the financial statements as a whole.

Overall materiality	CHF 10'000'000
Benchmark applied	Total assets
Rationale for the materiality benchmark applied	We chose total assets as the benchmark because Kudelski SA is a holding company that mainly holds investments in subsidiaries. Total assets is a generally accepted benchmark for determining the materiality according to auditing standards.

We agreed with the Audit Committee that we would report to them misstatements above CHF 1'000'000 identified during our audit as well as any misstatements below that amount which, in our view, warranted reporting for qualitative reasons.

Audit scope

We designed our audit by determining materiality and assessing the risks of material misstatement in the financial statements. In particular, we considered where subjective judgements were made; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain. As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Report on key audit matters based on the circular 1/2015 of the Federal Audit Oversight Authority

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Valuation of investments in subsidiaries and loans to Group companies

Key audit matter	How our audit addressed the key audit matter
Kudelski SA's investments and loans to Group companies are valued at CHF 625 million and CHF 309 million respectively. The company has allocated the investments in subsidiaries and loans to Group companies to 4 Cash Generating Units (CGU's): Digital TV (DTV): CHF 648 million Public Access (PA): CHF 208 million Cybersecurity (CS): CHF 39 million Internet of Things (IoT): CHF 39 million We focused on these areas in view of the significance of the amounts involved, the business segments' operating performance during 2021 and the judgement used by management about future results.	We obtained an understanding of management's process and controls over the valuation of investments and loans to Group companies. We obtained the Group's impairment analysis for all 4 CGUs and performed the following procedures: - Tested the mathematical accuracy of the model and traced amounts to underlying financial statement and other information, as applicable. - Assessed the quality of the cash flow projections by comparing the actual results to prior year budget to identify in retrospect whether any of the assumptions might have been too optimistic. - Reconciled the 5 year projections to the budget that was subject to scrutiny and approval by the Board of Directors and gained an understanding of the process undertaken to develop the projections. - We reviewed with management to substantiate its key assumptions in the cash flow projections during the forecast period and its intention and ability to execute their strategic initiatives.

The recoverable amount of the investments and loans is determined by management based on value-in-use calculations, which depend on cash flow projects and judgement of growth rates. Refer to note 2 – Accounting policies: Financial Assets and note 4.3 – Impairment of financial fixed assets	- We tested, with the support of our valuation specialists, the reasonableness of the cash flows growth rate after the forecast period. - Together with our specialists, we evaluated the reasonableness of the discount rate applied to those future cash flows. On the basis of the evidence obtained from our audit, we consider the valuation method and the assumptions used by the Group to be reasonable and appropriate for the valuation of Kudelski SA's investments and loans to Group companies.

Responsibilities of the Board of Directors for the financial statements

The Board of Directors is responsible for the preparation of the financial statements in accordance with the provisions of Swiss law and the company's articles of incorporation, and for such internal control as the Board of Directors determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors is responsible for assessing the entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Board of Directors either intends to liquidate the entity or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Swiss law and Swiss Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Swiss law and Swiss Auditing Standards, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made.
- Conclude on the appropriateness of the Board of Directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the entity to cease to continue as a going concern.

We communicate with the Board of Directors or its relevant committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Board of Directors or its relevant committee with a statement that we have complied with relevant ethical requirements regarding independence, and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, actions taken to eliminate threats or safeguards applied.

From the matters communicated with the Board of Directors or its relevant committee, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on other legal and regulatory requirements

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.

We further confirm that the proposed appropriation of reserves complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

PricewaterhouseCoopers SA

Luc Schulthess	Nicolas Daehler
Audit expert Auditor in charge	Audit expert

Lausanne, 22 February 2022

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