KUDELSKI GROUP 2020 ANNUAL REPORT

NAGRA
KUDELSKI GROUP

CONTENTS

ADAPTING TO A DISRUPTIVE 2020 REALITY WITH CREATIVITY AND INNOVATION

With the global COVID-19 pandemic disrupting people's lives and lifestyles as well as the world's economies, the Kudelski Group has shown its ability to adapt to market changes on a segment-by-segment and region-by-region basis.

The Group proactively reacted to the COVID-19 pandemic developing highly secure remote communications solutions and supporting pay-TV operators in launching new, innovative offerings. The Group also launched a range of public access solutions enabling consumers and operators to respect safety requirements. Additionally, demand has increased in Europe for the Group's cybersecurity and IoT security offerings with the pandemic leading to increased levels of piracy on networks, devices and transactions.

In Digital TV, while the effects of the pandemic have slowed down economic activities and, in many cases, delayed investments, the pay-TV sector has seen resilience and even growth in service and feature opportunities in advanced economies. Some of the Group's major customers have experienced a positive impact on their activities, resulting in more new subscribers and increased interest for their new, richer, multi-network and multi-screen offerings. For example, Telefónica's Movistar OTT service grew significantly in Spain, reaching 4,9 million active devices.

Additionally, the global pay-TV industry is experiencing a period of change and disruption, accelerated by the COVID-19 pandemic. Operators are increasingly looking to deploy direct-to-consumer and streaming content offerings that enable them to find new ways to monetize their content and, in the sports content industry, increase fan engagement. This trend has created an accelerated move toward all-IP networks. NAGRA has supported many broadcast operators in expanding their network to include IP and direct-to-consumer offerings and helped them go to market rapidly.

The premium content industry, including Hollywood level motion pictures, is also increasingly going direct-to-streaming, resulting in piracy on IPTV networks skyrocketing during the pandemic. This has created additional demand for NAGRA's anti-piracy expertise.

As the sports, media, and entertainment industry manages technical transformation to an all-IP landscape, with additional economic pressure due to the pandemic, it has become essential for operators to fine-tune their business for increased efficiencies. Business intelligence, data science, and analytics help them make better decisions across all the business aspects of content purchase, distribution, and consumption. Large client operators have shown increased interest in and demand for NAGRA's Insight business performance platform over the past year.

In the area of cybersecurity, Kudelski Security's cloud-first portfolio supports companies in their digital transformation initiatives, accelerated by the pandemic and the work-from-home economy, and the resulting growing frequency in cyber-attacks.

In the area of Internet of Things security, temporary closures and work-from-home have also boosted hackers' attacks on the nascent digital world and exposed potentially serious threats to the success of the Internet of Things. By leveraging more than 30 years of innovation in the fields of digital business models and device protection, the Kudelski Group is well positioned to help device manufacturers create, enable, sustain and protect connected devices and ecosystems.

Public Access activities have been impacted by the COVID-19 crisis. However, as a response, SKIDATA launched comprehensive solutions adapted to the challenging situations of their customers. For example, the solutions allow drivers to enter and exit parking garages completely touch-free and enable organizers to hold sporting events in a safe and secure way through online accreditation and a full COVID test program allowing entry only with negative test results.

Over the past years, demand for cloud-based, safe access to parking facilities, ski destinations and event venues increased, and the COVID-19 situation accelerated this trend. SKIDATA continues to drive the conversion to cloud-based e-commerce and security of these industries and has released solutions in each of its business units to address those needs.

The present annual report is providing more information on the initiatives taken by the Group's entities to address the new COVID-19-related reality.

ALWAYS LOOKING FORWARD, FOR 70 YEARS

The story began in 1951 and still goes on today, thanks to the Group's ability to evolve and innovate, always looking forward.

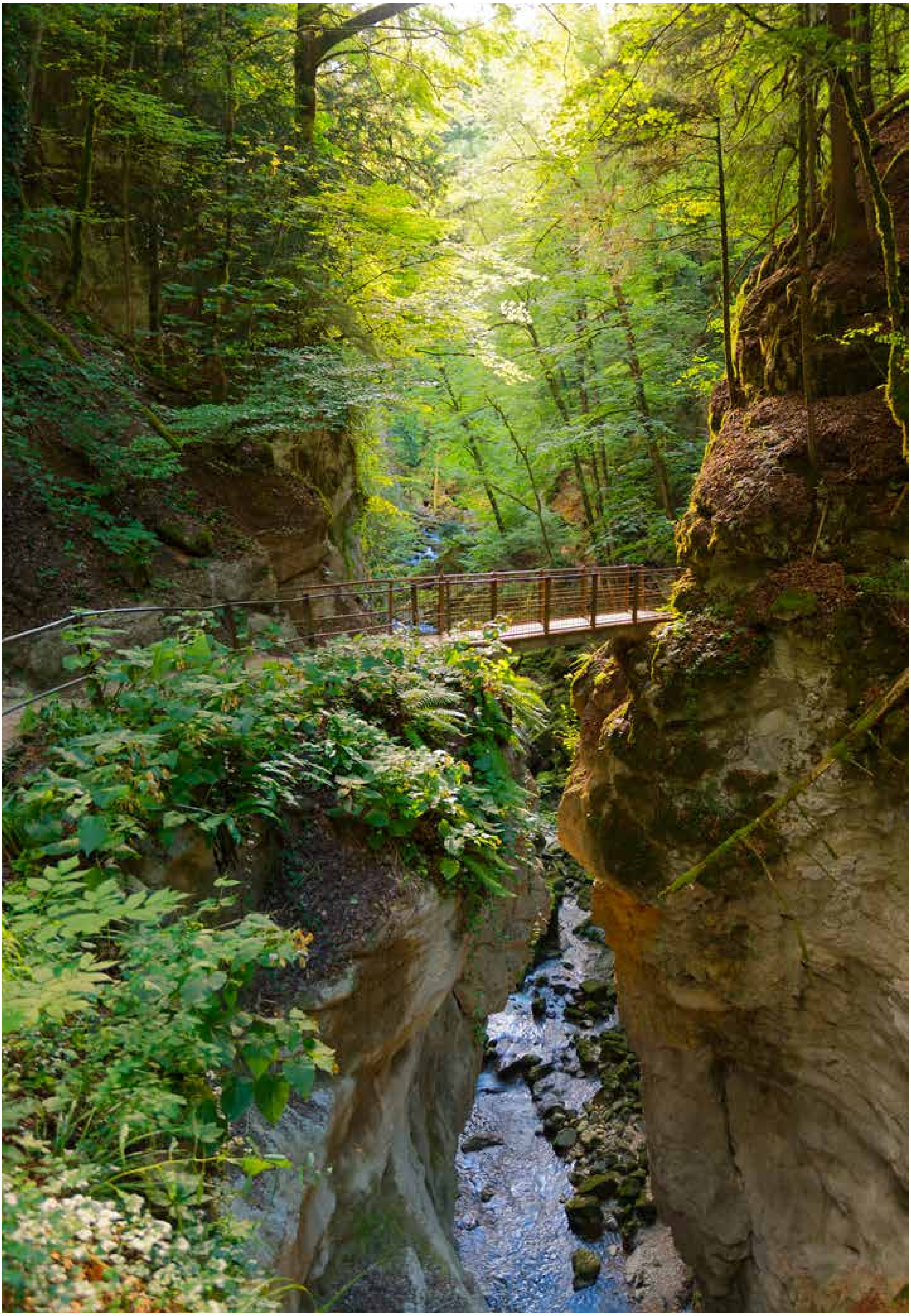
The Kudelski Group's innovations have taken part in some of man's greatest adventures.

First Everest expeditions, Mariana Trench exploration, Apollo missions… NAGRA recorders have been the trusted companions of adventurers, explorers, reporters, sound engineers and music lovers around the world for decades.

These mythical devices testify to the pioneering spirit that the Kudelski Group has demonstrated throughout its 70-year history.

From the revolutionary NAGRA recorders to today's totally contact-free mountain access solutions and ultra HD multiscreen content discovery platforms, the Group's innovations enable consumers to live their most entertaining experiences smoothly and responsibly.

In 2020, the Group launched innovative contactless solutions such as SKIDATA's touchfree parking access and payment solutions



SOLUTIONS THAT MAKE LIFE SIMPLER

Whether it's watching the latest movie at home or while on the move, reaching the ski slopes using fully contactless solutions, moving around with ticketless Park & Ride mobility offers, accessing car parks by just waving your hand, or making your banking transactions online, whatever your occupation, the Kudelski Group's technologies make life simpler and safer.

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

INTERVIEW WITH ANDRÉ KUDELSKI

Chairman and Chief Executive Officer of the Kudelski Group

What were the highlights for the Group in 2020 ?
2020 was a remarkable year that challenged the Group in unprecedented ways. The COVID-19 crisis significantly disrupted most of our business activities, with project delays and cancellations resulting in lower total revenues. At the same time, we were able to leverage the business transformation efforts initiated by the Group in 2017. Through proactive measures, we were actually able to improve our profitability and cash flow generation in 2020, especially during the second half of the year.

Overall, 2020 was a significant stress test for the Group. I am proud to say that we were not only able to pass this test, but we emerged as a stronger organization, highlighting the agility and adaptability that our transformation efforts made possible. From that perspective, we are seizing the opportunity from this crisis to accelerate our innovation activities in order to better position the Group for the post-COVID world.

What has been the impact of the COVID-19 pandemic on the Group in 2020 and what does it mean for the future ?
As a result of the COVID-19 crisis, 2020 was a uniquely unpredictable year. When the first lockdowns were imposed, our entire organization was able to transition within days to a work-from-home environment – without disruption to our business operations. More importantly, our ability to maintain business continuity meant that there was no disruption for our clients and partners.

At the beginning of the crisis, we saw reduced levels of new business activity, largely due to the lockdown restrictions and the economic uncertainty that led some clients to delay projects. However, we worked hard to boost our capabilities to digitally interact with our clients and customer prospects, and by the second half of the year, we were able to seize upon some new opportunities. In parallel, we were also able to innovate for the COVID and post-COVID times, introducing some compelling solutions across our product lines to better address new customer needs. We are excited to see positive traction for these solutions in the market.

With this in mind, what do you expect for the Group in 2021 ?
2021 does not look to be a return to “business as usual”, even if approval of vaccines suggests that we can see the light at the end of the tunnel. Our expectation is that the highly uncertain and volatile business environment will continue for most of 2021. As a result, we are working to further enhance our flexibility in order to ensure that we are able to better address demand fluctuations, both up and down.

The positive dynamics within our teams should continue to improve our ability to address market trends. We expect our Digital TV segment to remain strong in terms of revenues and profitability and that recent positive trends at our Kudelski Security and IoT businesses will continue. Due to the nature of its business, we expect our Public Access segment to remain volatile during the continued COVID crisis. Overall, for the Group, we expect to further improve our profitability, with overall revenues higher than in 2020.

2020 was a significant stress test for the Group. I am proud to say that we were not only able to pass this test, but we emerged as a stronger organization, highlighting the agility and adaptability that our transformation efforts made possible.

What has been achieved in terms of synergies and collaboration among Group entities, and how has this contributed to support the Group's performance?

The Group's transformation efforts initiated in 2017 has structurally improved the efficiency and the profitability of the Group and increased our agility. The more recent focus of our transformation has been to improve the efficiency of our corporate functions, including by leveraging cloud technologies for our IT infrastructure and looking for increased synergies among the Group's entities. This approach has enabled our employees to transition quickly and seamlessly to a work-from-home environment during the pandemic-related lockdowns.

An additional important benefit of the ongoing transformation has been better alignment among the different business segments of the Group, with a special focus on developing and marketing solutions across the four segments. This enables each business to expand beyond its traditional client base. It also enables increased innovation, which benefits our existing clients and attracts new prospects through our partner segment. In 2020, we were able to win clients for a combined offering between our Kudelski Security and Digital TV businesses, and based on positive customer feedback, we expect continued momentum for these solutions as well as further collaborative efforts among our Digital TV, Kudelski Security, IoT and Public Access businesses.

What are the main trends for Digital TV? How has the pandemic affected this sector?

The appetite for quality content increased in 2020 due to COVID-related restrictions and lockdowns. However, the pandemic negatively impacted the availability of sports content and reduced TV advertising revenues. While the number of distribution channels for content increased due to the multiplication of OTT offerings, the business of Digital TV operators generally remained stable. During these challenging times, our Nagra Insight platform has enabled operators to manage subscribers dynamically and proactively in order to optimize retention and revenue streams. Our joint solution with Samsung, TVKey Cloud, has also offered a low-touch approach for Digital TV operators to onboard new clients.

As evidence of the demand for quality content, piracy increased during the pandemic, due to the combination of a strong appetite for premium content and some extra free time for the hackers. This has kept our anti-piracy teams busy.

What are the priorities for Public Access? Are its physical access solutions able to meet new pandemic-related requirements?

Of all our business segments, Public Access has been impacted the most by the pandemic. This is not a real surprise due to the nature of its business. In 2020, the challenge was to simultaneously execute on the transformation of its business while adapting its business operations in response to the COVID crisis.

During 2020, flexibility has been a very high priority in order to ensure that our Public Access business adapts to the fast-changing environment. As testimony to the success of our efforts, while Public Access revenues were lower in 2020 compared to 2019, the segment's profitability and cash flow generation improved. We have also taken the opportunity to innovate, launching a series of innovations that allow consumers to use our products and solutions without physical contact. We have also introduced COVID-related solutions that are integrated into access gates, such as active crowd management for events that can help enforce COVID test or vaccine requirements and automatic body temperature controls.

How are the new offerings for Cybersecurity developing?

Our Kudelski Security business has continued to shift to higher value-added solutions and services. One of the most visible success stories from 2020 has been the 23% growth of the gross margin of this business, which was fueled by the 57% growth of our European business.

The pandemic has highlighted for the world that IT infrastructure is a critical resource that must be protected. We have also seen a massive acceleration in the migration to the cloud and an associated growth of our Managed Security Services. Our Managed Security Service offering has continued to receive excellent recognition from industry analysts, such as Gartner and Forrester. At the same time, these trends have negatively impacted the demand for on-premise security hardware, especially in the US market during the first half of the year, resulting in lower revenues from our technology resale business.

How is the IoT growth initiative developing ?

Under the new leadership of Hardy Schmidbauer, Kudelski IoT has seen a new dynamic with the acceleration of KeyStream, our secure IoT platform, and the launch of our new end-to-end IoT solution for asset tracking, which is initially targeted at vehicle management for car dealers. In 2020, we further developed our partnerships with key players in the industry, like Amazon for Alexa certification, in order to develop new business opportunities for future growth. As a result of these initiatives, we expect that our IoT unit will accelerate its expansion in 2021.

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

In 2020, we demonstrated that the Group is able to adapt quickly to challenging environments and to proactively adapt our business operations and processes. We are not only better prepared to face the uncertainties of the pandemic, but we have also adapted our products and solutions to take advantage of new opportunities that have emerged due to the COVID crisis. The key driver for a sustainable improvement of the Group's margins will be the growth of high value-added solutions, products and services in all four of our business units.

How do you expect the Group to move forward once the pandemic has been overcome ?

Once the pandemic subsides, we expect there to be a recovery in the business activities that were negatively affected by the COVID crisis. By capitalizing on the investments the Group has made in new technologies and solutions designed to help impacted customers get "back to normal" faster, we expect to benefit from these trends. SKIDATA customers and Digital TV solutions for sports offerings are the most obvious targets for such a post-COVID recovery. The current crisis has also shown that the Group can work efficiently and effectively by leveraging virtual communications and other IT technologies. We will not only continue to use these after the crisis, but we will look to improve the capabilities of these technologies and make them more intuitive and secure in support of our daily operations.

What will be the distribution to shareholders for fiscal year 2020 ?

Taking into account the Group's 2020 results, especially the strong free cash flow generation, and the Group's outlook for 2021, the Board of Directors is proposing a CHF 0.10 cash distribution per bearer share for approval at the 2021 Annual General Meeting of Shareholders. It is proposed that CHF 0.05 of this cash distribution be treated as a return of capital.

Do you have any closing thoughts ?

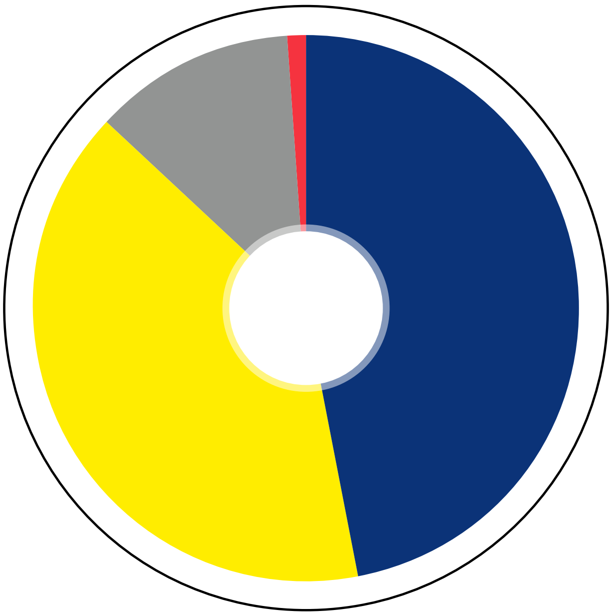
In the name of the Board of Directors and the Group's management, I would like to take the opportunity to thank our teams who have worked very hard during 2020 to address the unprecedented challenges that we faced as a result of the pandemic. Despite the strong headwinds, our teams have performed well to ensure business continuity, proactively manage business transformation and to invest in addressing new opportunities that have emerged from the COVID crisis. Our thoughts also go out to our customers, partners and shareholders. We thank you for the support you have provided during these challenging times.

We were able to innovate for the COVID and post-COVID times, introducing some compelling solutions across our product lines to better address new customer needs. We are excited to see positive traction for these solutions in the market.

KEY FINANCIAL DATA 2020

		31.12.2020	31.12.2019	Change
Total revenues and other operating income	**USD million**	**741.5**	**827.3**	**-10.4%**
Operating income before depreciation, amortization and impairment (OIBDA)	**USD million**	**64.3**	**40.6**	**58.5%**
in % of total revenues	%	8.8%	5.0%	
Operating income (EBIT)	**USD million**	**16.1**	**-15.3**	**205.1%**
in % of total revenues	%	2.2%	-1.9	
Net income from continuing operations	**USD million**	**-18.0**	**-38.6**	**53.4%**
Earnings per share	**USD**	**-0.4220**	**-0.8130**	
Money returned to shareholders (proposed per bearer share)	**CHF**	**0.10**	**0.10**	
Cash flow from operating activities	**USD million**	**132.6**	**34.2**	
Cash and cash equivalents	**USD million**	**152.6**	**74.6**	
Number of employees at December 31 (headcount)		**3250**	**3520**	

Revenues per segment



Digital Television
47%

Public Access
40%

Cybersecurity
12%

Internet of Things
1%

Digital Television

575 operators

300 million subscribers

Public Access

+7 300 customers

10 000 installations worldwide

Cybersecurity

900 customers

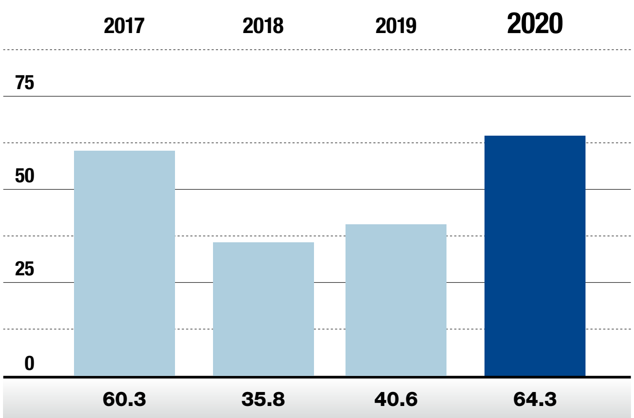
+16 billion alerts per day

Internet of Things

40 customers

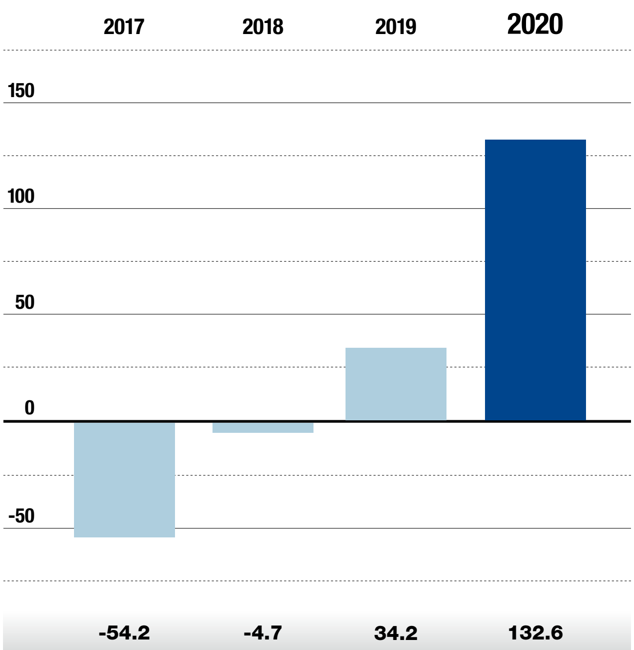
OIBDA*

In million USD



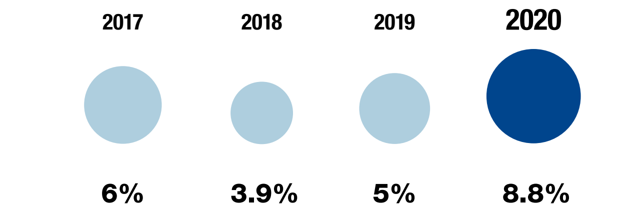
Operating cash flow

In million USD



OIBDA*/Total revenues

In %



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.

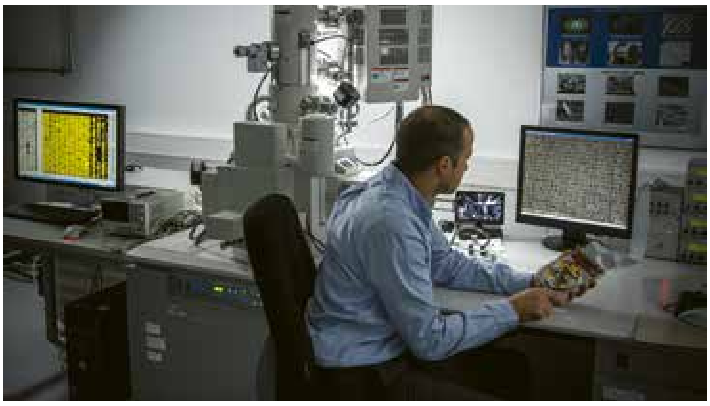
Technology pioneer

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. Kudelski's solutions enable customers to grow in their markets with the necessary confidence.

More than 500 million users enjoy Kudelski Group solutions every day



Digital Television

NAGRA KUDELSKI

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 also a global leader in Public Access solutions. The world's leading parking facilities, stadiums and mountain resorts use its SKIDATA people and vehicle management solutions that are adjusted to address today's social distancing and hygiene requirements.

Cybersecurity

KUDELSKI SECURITY

Leveraging its long-standing expertise in securing digital content and 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 company also designs and delivers solutions, technology and services to support companies across all industries in securing their Internet of Things innovations.

70 years
of innovation in 2021

500 million
users

3 250
employees

Presence in
32 countries

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.

2020

The Group proactivelly adjusts to the COVID-19 pandemic, developing highly secure remote communications solutions and supporting pay-TV operators in launching new, innovative offerings.

The Group also launches a range of public access solutions enabling consumers and operators to respect safety requirements.

SKIDATA's latest touchfree parking access solution

FOUR RESILIENT BUSINESS PILLARS WITH STRONG SYNERGIES

› THE KUDELSKI GROUP

	NAGRA KUDELSKI **Digital Television**	SKIDATA KUDELSKI GROUP **Public Access**
DESCRIPTION	Long-standing expertise in content value chain and content integrity protection, as well as in distribution technologies. Strong product range and customer footprint.	World leader in public access and revenue management solutions for ski resorts, off-street parking and events.
MAIN FOCUS	Secure, open, integrated platforms for broadcast, broadband and mobile networks with personalized viewing experiences. Mastering security technologies from silicon up to the cloud. Key technologies for monetizing premium video content. **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
Unique positioning in securing large corporations' IT networks and cloud infrastructures from the board room to the field.	Strong skillset and solutions to secure connected devices and device-related data collection and exploitation, as well as decision-making process.
End-to-end cybersecurity solutions for a wide variety of customers across multiple sectors. Protect enterprises and governments against cyberattacks. Mastering security technologies including encryption and blockchain.	Resilient and easy-to-integrate and operate IoT security solution. Keep the hackers away from IoT operations and protect strategic assets. Mastering security technologies from silicon up to the cloud. **Secure by design**
Switzerland / USA / Europe	USA / Europe
2012	2017
In development	In development

SEGMENT STRATEGY

Public Access

- Enable digital transformation at our customers
- Transform SKIDATA for increased agility
- Increased profitability and cashflow generation through synergies
- Develop breakthrough solutions using new technologies

Digital TV

- Deliver innovative, consumer-centric solutions
- Explore value segments adjacent to the video value chain
- Continuously improve and manage operational excellence agendas
- Make selective investments to develop new solutions

CROSS-SEGMENT

WE EMPOWER OUR CUSTOMERS TO SECURE AND GROW THEIR BUSINESS FOR THE LONG TERM

PRODUCTS SALES

Long-term portfolio management

- Prioritize long-term performance and value creation
- Continuously improve operational efficiency
- Optimize balance sheet
- Carefully select investment opportunities

Establish leadership in growing markets

- Extend our trusted partner role to become leader in new segments
- Focus on high value-added solutions and scalability
- Boost cross-segment synergies to broaden our customer offering

KUDELSKI GROUP PRINCIPLES

Cybersecurity

- Expand position as best-in-class trusted advisor
- Focus on emerging, value-adding technologies
- Grow Managed Security Services
- Incident Response
- Accelerate IP generation through R&D and innovation
- Promote a secure by design approach

Internet of Things

- Deliver secure by design solutions
- Develop agile, secure and industry-specific IoT solutions
- Address new markets through selective partnerships
- Enter new IoT market segments with turnkey solutions
- Reach critical scale

COLLABORATION

WE PROMOTE CROSS-SEGMENT COLLABORATION

R&D SUPPORT FUNCTIONS

Innovating for our customers

- Pioneer the business relevance of new technologies
- Ensure future sustainability of our businesses through R&D and innovation
- Steer our innovation investments with portfolio approach

Taking care of our business ecosystem

- Ensure the sustainability of our solutions to better serve our clients
- Building long-term partnerships
- Sustainable and secure by design
- Promote win-win sustainable business models
- Long-term HR values

CORPORATE SOCIAL RESPONSIBILITY

› KUDELSKI GROUP

Taking care of our employees

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 company expands its training programs to develop its talent pool, promote self-development and address market needs. In 2018-2019, the Group launched 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 more the result of creativity and cooperation between departments than a financial investment. It has proven to be very popular among employees, with an occupancy rate close to 100%.

– 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.

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 minimal energy consumption thanks to designed solutions and products.

– Optimizing energy efficiency in buildings that we own and some other locations by improving thermal insulation and ensuring natural lighting where possible.

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

– Providing advanced video conferencing tools to optimize corporate traveling.

– Promoting sustainability at the workplace by actively engaging employees.

– Advising our customers with the most sustainable and energy-efficient solutions in mind.

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

Embedding sustainability and high-added value in our products

NAGRA's products have been sustainable by design for nearly 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 twenty to thirty 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, pushing away 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 through charitable giving, volunteering and supporting various social initiatives.

- In terms of recruitment, the Group remains as close as possible to its markets, where the local talents are.

- 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 US 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 uses the services of local associations supporting disabled people.

- The Group is a partner of the Greater Phoenix Economic Council, the World Economic Forum and the Montreux Jazz Festival, and maintained its support throughout the COVID-19 pandemic.

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 Group values, policies and procedures and to respect the appropriate legislation and local laws.

- The Group favours 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 harm content creators. It is a founding member of Latin America-based Alianza contra 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), Sygnal (Poland).

- The Kudelski Group takes care of its employees by providing them with the 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 company promotes architectures that enable data privacy by design and fully support GDPR structures.

WORLD-CLASS INTELLECTUAL PROPERTY PORTFOLIO

› KUDELSKI GROUP

With its nearly 70-year history of innovative and award-winning products, the Kudelski Group has a long tradition of carefully building a strong, global intellectual property (IP) portfolio.

The Group's commitment to IP is grounded in the fundamental belief that IP is essential to promote collaborative development, build future competitiveness and fuel economic growth. With its annual investment in research and development approaching $150 million, the Group's IP portfolio represents a critical asset of the company that must be developed and protected.

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 digital- and 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. From an accounting point of view, Kudelski Intellectual Property and Innovation is included in Digital TV.

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 2020, the Group made significant inroads into licensing new entrants in the OTT/streaming video market and social media markets, as well as expanding to areas like interactive fitness. In addition, the Group sought to renew and broaden existing agreements with select licensees and used its robust IP position to help drive additional business for the Group. 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, patent or technology transfers and cross-licenses into the engagement.

The Group's IP will also continue to serve strategic defensive needs and be used to deter competitive threats when appropriate.

Supporting the Group's emerging businesses

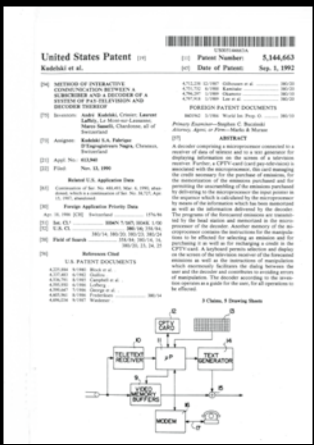
In 2020, the Group's IP organization continued to support the Group's growing cybersecurity and Internet of Things businesses, by filing new patent applications covering promising technologies being developed by the Group in these areas.

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

The Group expects to continue developing new licensing programs also by leveraging its existing IP assets outside of the pay-TV and OTT/streaming video markets, such as in areas like parking systems and smart meters.

World-class licensing

By having established cross licenses 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, including cross-licenses from Cisco, Google, Disney and AT&T.



In 2020, the IP organization continued to support the Group's growing cybersecurity and Internet of Things businesses

DIGITAL TELEVISION

Providing innovative solutions for the entire premium content distribution ecosystem

STRONG SYNERGIES FOR A BROADER SOLUTION REACH

As the Kudelski Group moves into its 70th anniversary, the pursuit of technology excellence continues to be at the core of each of the business lines' DNA. Over the years, the market-led initiatives and new consumer-focused businesses have enhanced the interchange of ideas, technology, and strategies inside the Group.

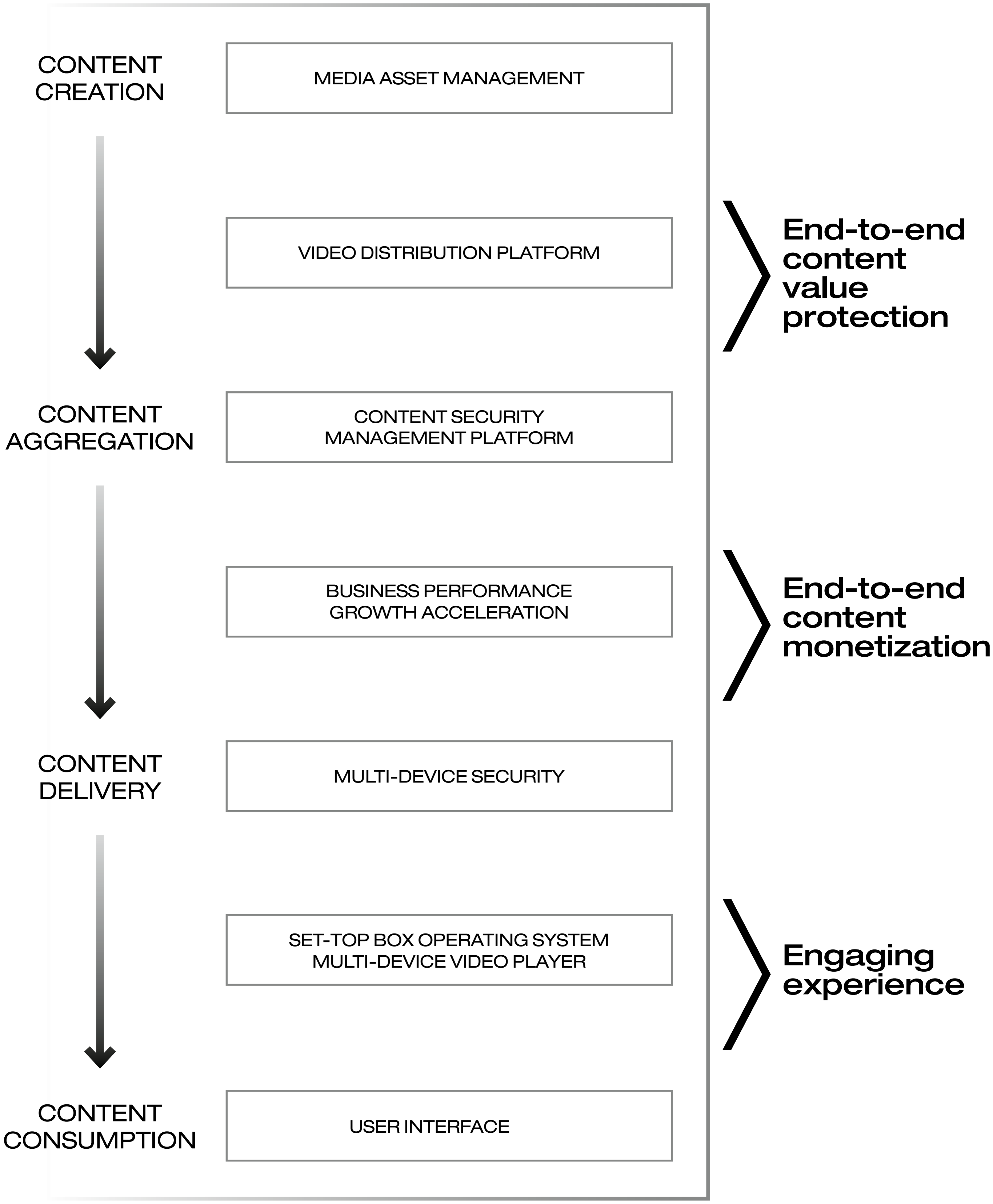
This has led to the fostering of deeper internal ideation, cross-pollination, and meaningful connections that have allowed the Group to develop strong synergies for a broader solution reach.

Focus on interconnectivity
Throughout 2019, the Digital TV business worked to achieve its ambitions of business efficiencies. In 2020 a further drive saw concentration on synergies within the Kudelski Group's other business areas and departments, which has allowed the building of strong internal bridges and shared technology resources, innovation, and business/solution ideation for a more strategic and broader market portfolio offering.

Continued pursuit of technological excellence
NAGRA continues developing its Digital TV portfolio in line with market requirements while maintaining a balance of traditional pay-TV solutions and new all-IP based solutions. Recent industry awards are a testament to the continued pursuit of technology excellence.

Consumer-focused digital business enablement
Consumers remain the focus of all NAGRA solutions. The Group has continued to build upon the learnings and feedback of its long-standing customer relationships and most recent direct-to-consumer offerings in the media and entertainment market.

A mixed solution portfolio
In a worldwide market, a product portfolio's flexibility is paramount to market success. As the pay-TV world continues to adapt to an all-IP environment, albeit with broadcast continuing to defend its market dominance, NAGRA has designed a mixed solution portfolio that fully reflects market needs.


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

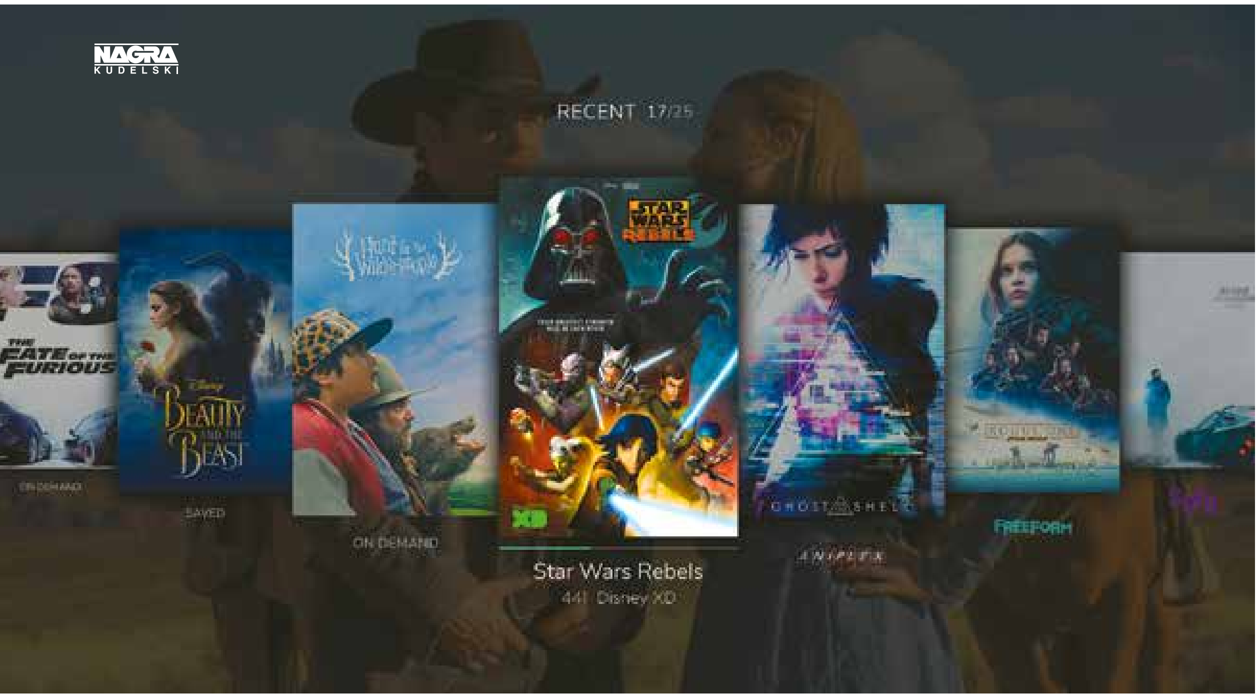
SECURITY: AN ESSENTIAL INGREDIENT TO MONETIZATION

› DIGITAL TELEVISION

As the world becomes increasingly connected and consumers demand both traditional broadcast services coupled with innovations in IP to enrich their experience, it has never been more critical to have a comprehensive security strategy in place.

With the ever-growing number of connected devices at home and in business and the security weaknesses introduced by consumer and IoT devices, piracy threats on IT infrastructures and content delivery are increasing at an unprecedented pace.

The pay-TV environment and these broader industry challenges are addressed within the Kudelski Group's extensive security portfolio in content protection and business protection, to include IoT security and cybersecurity solutions as the pay-TV operators extend their business reach.



Delivering pay-TV solutions that solve market needs

BROADCAST

Operators are increasingly looking for an advanced solution that can also manage the IP side of their network through a centralized security platform. They also need to secure content across this more extensive distribution network through a diverse set of technologies such as watermarking and anti-fraud.

NAGRA Security Services Platform (SSP) and NAGRA Contego continue to invest in supporting broadcasters both in traditional smartcard-based (CAS) business alongside a focus on integrated and all-IP technologies. NAGRA's security portfolio helps operators as they look for innovative ways to continue to grow, monetize, and retain their subscriber bases while ensuring comprehensive service security strategies are put in place across the broadcast ecosystem.

DIRECT-TO-TV

New direct-to-TV solutions are becoming more attractive to operators. They allow them to acquire new subscribers online, without requiring any additional hardware to be installed. They also enable operators to virtualize the set-top box, retain control of the user experience and open new retail channels without compromising on security.

NAGRA has disrupted the market by working with Samsung to create an open specification called TVkey, which puts premium security in the TV's chipset. The solution also enables onboarding of new clients through impulse subscription on Samsung TV sets.

SECURE STREAMING

For OTT pureplay providers and those service providers migrating to an IP ecosystem, the greater operational service area provides a more significant threat of illicit service usage. This leads to an increased need to secure content across many different device platforms and identify leaks.

NAGRA addresses this range of threats through its Active Streaming Protection framework comprising multi-DRM, watermarking, fraud prevention (anti-credential sharing), session management and device authentication. This framework protects both the content and the service and can be extended further with anti-piracy services.

ANTI-PIRACY

With the collapse of cinema windowing resulting in motion pictures going direct-to-streaming, the level of commercial IPTV piracy has skyrocketed during the global pandemic, destroying legitimate revenues and luring consumers
away to illicit services.

NAGRA'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 industry including content providers, service operators, law enforcement, investigators and coalitions such as Alianza in Latin America, NAGRA provides unrivaled intelligence levels to document and file legal procedures on behalf of or in partnership with an operator or coalition.

MANAGED CYBERSECURITY SOLUTIONS

Pay-TV operators who have a substantial online and connected business presence in the market see an increasing need to look at the broader implications of Internet connectivity, including content storage, security, enterprise cybersecurity, and IoT device security.

The Kudelski Group's Managed Security Services solutions offer powerful security technologies, proven use cases, and experienced threat analysis to reduce detection time to just a few days or hours and provide unified visibility across operators' technology landscapes.

The Kudelski Group has an extensive portfolio of state-of-the-art content protection solutions

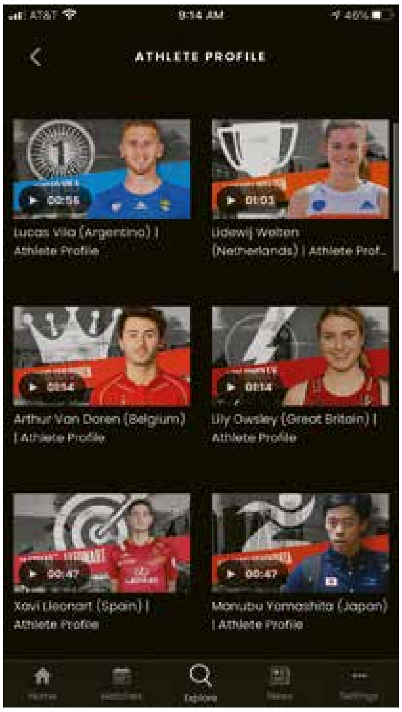
BESPOKE AND OFF-THE-SHELF CONSUMER-DRIVEN SOLUTIONS

› DIGITAL TELEVISION

Media content delivery and consumption platforms become more relevant with the increasing complexity, volume and range of connected devices such as ultra high-definition screens, smartphones, tablets, and game consoles that are part of the pay-TV infrastructure.

Reducing today's system complexity has become one of the key benefits that a comprehensive, secure, packaged, and robust solution from NAGRA can deliver. Operational advantages of deployment speed, performance, and scalability in a consumer-focused market are critical elements of any solution for both regional, national, and global operators.

Additionally, evolving viewer behaviors and a very dynamic competitive landscape are posing significant challenges to the premium content industry, leading to growing risks of increased churn and reduced ARPU (Average Revenue Per User) in several markets. With its business performance platform, NAGRA helps pay-TV providers drive their business using data and improve their bottom-line.



NAGRA's direct-to-consumer app developed for a leading international sports federation

Delivering pay-TV solutions that solve market needs

PAY-TV AND CONSOLIDATION
As major pay-TV operators find themselves with early broadcast and broadband systems with a patchwork of mature technologies, they spend more time engineering than creating new and exciting business opportunities.

The NAGRA OpenTV Video Platform for broadcast and broadband addresses this with a purposeful open and modular solution enabling operators to regain the freedom to innovate at speed and within budget. The platform enables them to consolidate technology, business and markets, manage content and services for greater monetization and obtain comprehensive analytics.

OTT SPORTS AND DIRECT-TO-CONSUMER STREAMING
The sports industry is faced with changing market opportunities as broadband access means they can reach a broader audience than with a limited broadcast footprint. There is also a desire to control their rights and financial future; sports have identified the direct-to-consumer route as an exciting solution for direct fan engagement. However, not all sports have the technical teams that could deliver viable, secure multiscreen streaming capability.

NAGRA's OpenTV based cloud Sports-as-a-Service solution, combined with digital transformation business modeling, was behind a successful cross-selling with Sporfie. The secure app-based streaming solution with exceptional user interface and user experience as well as embedded targeted advertising, subscription, and management capability, has enabled the national motor racing to deliver a new level of content operations and engagement to their fans, equal to those sports at the highest level.

PAY-TV AND OTT OFF-THE-SHELF STREAMING
The traditional broadcast market also looked to where their customers were migrating, moving beyond broadcast to an all-IP solution became a strategic market requirement to extend their traditional reach.

The NAGRA GO Live solution offers a full white-label app-based streaming OTT solution, designed to support all distribution technologies, consumer devices, and security clients using one unified management system. It can be deployed on-site, from a private cloud or a public cloud, managed by the pay-TV operator, or as a fully managed service offering economies of scale that solve pay-TV needs in specific regions.

DIRECT-TO-CONSUMER AND SPORTS STREAMING INNOVATION
In a connected world where everyone has their mobile devices within reach and is often found filming from the stands at sports events, NAGRA identified a need and built an innovative, simple solution for capturing sports videos that takes advantage of all cameras at an event.

Sporfie is a sports video platform that gives individuals and teams, from parents at youth games to marketers and officials at the professional level, the power to live stream games, capture, replay, and share personal highlights without the distraction of filming or the need to edit hours of footage. The service has now been extended to support any camera, including mobile devices, action cameras, and even permanent facility setups.

BUSINESS PERFORMANCE
Evolving viewer behaviors and a very dynamic competitive landscape are posing significant challenges to the premium content industry, leading to growing risks of increased churn and reduced ARPU (Average Revenue Per User) in several markets.

Insight is NAGRA's action-oriented platform designed to drive business and operational excellence efforts based on data and artificial intelligence. As operational performance is very much industry specific, Insight has been built for the premium content, pay-TV and telco industry. Since its inception, the platform has created additional revenues and improved the bottom line for some of the Kudelski Group’s biggest customers by better allocating marketing campaign budgets, optimizing call center routing and personalizing pricing and package offering.

DELIVERING INNOVATION TO ADDRESS DIGITAL TRANSFORMATION

› DIGITAL TELEVISION

The sports, media, and entertainment industry remains a global success story, with this sector continuing to provide a growing range of services to millions of households worldwide. As new transmission technologies are developed (e.g., 5G, ATSC 3.0), the industry continues to adapt and learn to work in competition and partnership to seamlessly combine broadcasting, telecommunications, and Internet services for both businesses and consumers, at home, in the office or on the move.

Today, the global pay-TV industry, independently of COVID, is experiencing a period of change and disruption. Internet and SVOD providers have had to reduce bandwidth and programs' quality as increased consumption has put pressure on infrastructure. As a consequence of COVID, consumers are increasingly using in-home networks for video conferencing and webinars to maintain their business activities.

The pay-TV sector has seen resilience and even growth in service and feature opportunities, especially as new streaming companies that rely purely on premium sports content look to partner with the more stable infrastructure companies (pay-TV). Additionally, even as content companies, such as Disney, HBO and Starz, go direct to consumers, they still see the need and benefit of having their services included in the pay-TV lineup, for ultimate consumer reach.

New challenges for operators

With an increasing number of broadcasters needing to retain their existing operations and adopt the fast-growing demand for IP solutions, operators are looking for a solution that can manage their network's IP side through a centralized security platform and handle a diverse device portfolio. They also need to secure content across this more extensive distribution network through a broader set of technologies such as water-marking and anti-piracy.

Working with a world-leading telecommunications/broadcast operator, NAGRA deployed a significant cloud-based, global pay-TV Security SaaS (Software as a Service) solution. NAGRA successfully managed the deployment and monitoring, effectively streamlining a global, multi-network, multi-device content value protection solution into the global market.

Fighting international piracy

NAGRA has been very active in the global fight against service and content piracy. During 2020, NAGRA's teams of specialists were instrumental in successfully taking down large piracy rings in Latin America and across several European countries.

For example, in Spain, a multi-level task force including Europol saw NAGRA Anti-Piracy services involved in the successful dismantling of an international piracy ring that targeted international premium football, Hollywood grade films, and TV series. NAGRA will continue to expand and work with partners to increase the visibility and minimize the effect of these criminal organizations.

For more information, see: https://anti-piracy.nagra.com

Greater understanding of business and consumers

As the sports, media, and entertainment industries manage technical transformation to an all-IP landscape, an increase in consumption across all mediums, as well as economic pressure from the pandemic, never have they needed a greater understanding of the intricacies of their business and consumers. Business intelligence, data science, and analytics are required to help operators fine-tune their business for increased efficiencies across all the business aspects of purchase, distribution, and content consumption.

NAGRA Insight enables service providers to manage every aspect of their operations, including their subscribers, more effectively and to focus on growth. This solution can help organisations around the world optimise their entire business to drive performance improvements and operational excellence.

The NAGRA Insight business performance platform won the “Best Data & Analytics Innovation” Award at the CSI Awards 2020 in September 2020 as well as the “AI and Machine Learning Innovation of the Year” Award at the VideoTech Innovation Awards 2020, the ultimate celebration for companies and individuals that are revolutionizing today’s global video industry.

For more information, see: http://Insight.nagra.com.

Sports market - business transformation

The international sports market is following market trends with direct-to-consumer now offering a route to the business of direct fan engagement. Sports have a strong desire to control their premium content and find solutions to monetize their business through streaming, subscription, advertising, merchandising, podcasting, and direct-to-consumer forms. This sees lower tier sports now availing themselves of the direct-to-consumer technologies.

During 2020 NAGRA signed a ten-year partnership with a leading International sport federation to launch their Home of Sport, a multiscreen streaming service with a fan engagement app that enables the federation to create a new digital business and offer an outstanding user experience for the millions of fans, players, and officials worldwide. Despite the pandemic, NAGRA achieved a significant milestone with a highly successful remotely managed launch of a new cloud-based direct-to-consumer sports solution.

For more information, see: https://nagra.sport

Broadcast - 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 undergo an overhaul of its over-the-air broadcast business to offer what has been named NextGenTV, which is essentially IP in the sky. As the entire country looks to provide a more flexible, exciting service capability with enhanced consumer offerings, NAGRA is well positioned to bring to bear its portfolio of products into this new market segment.

Working closely together with the ATSC 3.0 Pearl Consortium operating the Phoenix Model Market, NAGRA delivered an “on-air” proof of concept during 2020 to demonstrate how a NextGen one way secured premium content broadcast to unconnected broadband devices could still be used to offer the broadcasters a route to new content monetization. The concept uses tried and tested secure content protection techniques and a secure embedded QR code in the transmission signal to allow the consumer to unlock services quickly and simply.

2020 MARKET HIGHLIGHTS

Americas

Altice USA and NAGRA have continued to extend their partnership on anti-piracy, leveraging NAGRA's anti-piracy expertise based on Open Source Intelligence (OSINT), field investigation and IoT forensic analysis. Such innovative approach has already demonstrated positive results.

Altice USA has also extended the reach of NAGRA Insight, the business actionable data platform that leverages artificial intelligence not only to address the business challenges associated with subscriber churn and business growth but also to help monitor and address the customer quality of service and experience. The reach of Insight has included newly deployed devices delivering the signature Altice One entertainment experience such as AppleTV 4K. During the COVID-19 crisis, this innovative solution has supported Altice USA's initiative to continue increasing customer satisfaction.

In addition, Altice USA has successfully deployed NAGRA PROTECT, the leading one-way broadcast content protection to secure and enable a new generation of HD DTA (Digital Television Adapter). This converter box has complemented the already deployed Altice One platform to provide a consistent user experience among the different consumer devices in the home and continue to drive Altice USA's subscribers towards a better and richer customer experience.

In the United States, with the goal to free-up 280 MHz of satellite spectrum to make way for 5G high-speed networks, the US Federal Communications Commission has provided incentive for programmers, broadcasters and content distributors to procure and migrate to new video distribution technologies including the security in order to continue operating in the limited C-band spectrum. NAGRA has been awarded by Harmonic to provide security for the video service for a major Multi Service-Operator in the country.

Claro, the largest cable operator in Brazil, has started to deploy NAGRA's connected security SSP/CONNECT. With this deployment, Claro is trusting NAGRA's state-of-the art security backend and security client for IPTV, QAM, hybrid and OTT use cases including Android TV. Additionally, NAGRA 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 deployed NAGRA's actionable business analytics solution (Insight) to measure the audience and to help Claro in the business decision-making process based on clear and trustable data that Insight provides for TV consumption.

As an extension of the original NAGRA Conditional Access System at Claro Colombia, a cardless-based system with the NAGRA PROTECT solution was launched during the first half of 2020 with great success. The cardless solution originally planned for HFC (Hybrid Fiber-Coaxial) networks is also available for IPTV usage and will provide secure and improved service for mass deployment on low-cost set-top boxes. With this, NAGRA continues to grow as a reference and trusted partner in Colombia with the potential to expand to the rest of America Movil subsidiaries.

In Uruguay, Montecable, the first pay-TV operator in the country to deploy an OTT service, implemented the NAGRA GO Live OTT solution in early 2018 with the launch of their MC GO Live streaming service. Since then, Montecable has been consistently investing in this platform by migrating to the cloud, adding Android TV support as well as VOD for local content, and updating MC GO Live to its new user interface. Now NAGRA is providing Montecable with the implementation of the "Third Party VOD" feature that will allow a single sign-in, browsing and accessing content from platforms like HBO and Fox, all from the familiar and operator-branded MC GO Live app interface.

Additionally, expanding deployments are taking place with various operators in Central America and the Caribbean in the cloud, demonstrating NAGRA's focus on the transition towards "as-a-service" models.

Asia/Pacific

In India, watermarking opportunities with large OTT operators have gained significant momentum. NAGRA's mDRM services with Airtel crossed an historic 1.5 billion licenses milestone and continues to grow. Linear cable and satellite subscribers continue to grow with added focus on Android TV-based set-top boxes.

In Singapore, NAGRA deployed a converged cloud-based solution for the StarHub TV+ service, including OpenTV Video Platform, Security Services Platform, and Connect Player, operated as a managed service.

In China, Startimes selected NAGRA's Contego cardless solution for its Africa operations, and deployed over one million cardless solutions in Africa in 2020.

In South Korea, the NAGRA NexGuard forensic watermarking solution was selected and implemented by SK Broadband, one of the largest IPTV service providers in Korea. SK Broadband will deploy this solution into all their set-top box models. NAGRA NexGuard forensic watermarking has been protecting SK Broadband's premium content value chain since December 2020.

In Taiwan, NAGRA successfully launched the very first brand new Security Services Platform headend bundled with a new-generation Android 4K set-top box for end-to-end integration with TBC.

In Indonesia, MNC Vision, the leading DTH pay-TV operator, launched commercially the NAGRA PROTECT cardless solution.

In the Philippines, Cignal, the leading DTH pay-TV operator, has seen a significant growth with NAGRA's cardless solution, reaching 3 million subscribers in November 2020.

Europe

As part of the long-term agreement between NAGRA and Vodafone Group, the deployment of Vodafone TV has continued to grow during 2020, especially in Eastern Europe. This evolution reinforces NAGRA's strategy to offer a central Security Services Platform providing security services for both open devices and Vodafone TV set-top boxes with an increasingly larger service footprint.

NAGRA developed for Canal+ a new Insight module collecting and analyzing audience data from non-connected satellite set-top boxes. NAGRA provided a complete solution that uploads the audience data via a 3G-GSM network. It allows Canal+ to maximize its content portfolio and acquisition costs.

In France, NAGRA has developed its digital media security relations with TV5MONDE, one of the main French-speaking TV broadcasters whose mission is to spread French culture internationally. TV5MONDE has selected NAGRA mDRM and server-side watermarking to secure its OTT services in Africa. This deal will enable TV5MONDE to access broadcasting rights for OTT premium sports contents.

In the United Kingdom, Virgin Media, an operating company of Liberty Global, has deployed NAGRA's NexGuard forensic watermarking technology as part of the new Virgin TV 360 experience available on its 4K-ready set-top box and Virgin TV Go service.

The Italian national broadcaster RAI Radiotelevision Italiana S.P.A. chose NAGRA's watermarking and anti-piracy Services to protect and monitor its most valuable free-to-air content assets. NAGRA provides an advanced business intelligence tool to monitor and take down illegal copies from illegal websites and social networks.

In Spain, Telefónica's Movistar OTT service continues to grow successfully, with significant growth during the COVID-19 pandemic, reaching 4.9 million active devices connecting to the NAGRA OpenTV Suite platform.

Telefónica continues to focus on moving subscribers to higher value FTTH (Fiber-To-The-Home) packages and as a result increasing their average revenue per user, using the NAGRA SSP solution for IPTV with more than 4.5 million pay-TV customers worldwide.

NAGRA and SmarDTV have launched a satellite set-top box to enable Telefónica to distribute their premium TV channel offer to their HORECA (Hotels, Restaurants, Cafes) professional customers in Spain mainland and Canary Islands.

In Spain, LaLiga, the major premium sports football right holder, has launched an OTT app leveraging NAGRA mDRM as they raise their content value at the highest level. This enables LaLiga sports content to be played on open devices in a secure environment.

In Portugal, NOS will rely on NAGRA mDRM to secure content in their customers' open devices, consolidating the partnership between the companies not only in cable and satellite but also extending it into the OTT world.

XTRA TV, a subsidiary of Media Group Ukraine, one of the largest media groups in the country, has selected TVkey Cloud to deploy its satellite service on Samsung Smart TVs. NAGRA's unique cloud-based solution will help grow XTRA TV service even faster, by creating a new channel to market and deliver a user-friendly viewing experience for end-users.

In Romania, NAGRA has extended its partnership with RCS&RDS by signing a new 5-year contract to provide and maintain NAGRA's OneCAS system. RCS&RDS offers satellite, cable, internet and fixed telephony services in Romania and Hungary as well as mobile services in Romania, Spain, Italy and Hungary.

Tele Columbus, also known as PYUR, the second largest cable operator in Germany, moved to cardless Conditional Access Modules based on NAGRA and SmarDTV.

Africa

In sub-Saharan Africa, like in the rest of the world, the effects of COVID-19 have slowed down economic activities and in many cases delayed investments. However, Global Broadcast Ltd, based in England with operations in Togo and Sub-Saharan Africa providing English and French language DTH services over West Africa, have offensively expanded with significant orders of set-top boxes with factory paired embedded NAGRA smart-cards.


SKIDATA

PUBLIC ACCESS

Comprehensive solutions to optimize revenues for infrastructure operators

GLOBAL LEADER IN ACCESS AND REVENUE MANAGEMENT SOLUTIONS

› PUBLIC ACCESS

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

With market organizations on all six continents, SKIDATA continues to solidify its market leadership position across its segments.

Customer-driven approach

SKIDATA manages complex projects throughout the world, aiming to optimize the revenues of operators and to increase the convenience and safety of their end-users. With a consultative approach, the market innovation leader cultivates strong and lasting partnerships with both customers and partners to deliver turnkey, integrated solutions. SKIDATA continues to drive the conversion of industries to cloud-based and e-commerce solutions to provide the full advantage of completely digitized systems to their customers.

Agile adaption of solutions to COVID-19

To swiftly react to the unprecedented situation of COVID-19, SKIDATA launched comprehensive solutions adapted to the challenging situation of their customers. For example, the solutions allow drivers to enter and exit parking garages completely touch-free and enable organizers to hold sports events in a safe and secure way through online accreditation and a full COVID test program allowing entry only to persons with negative test results.

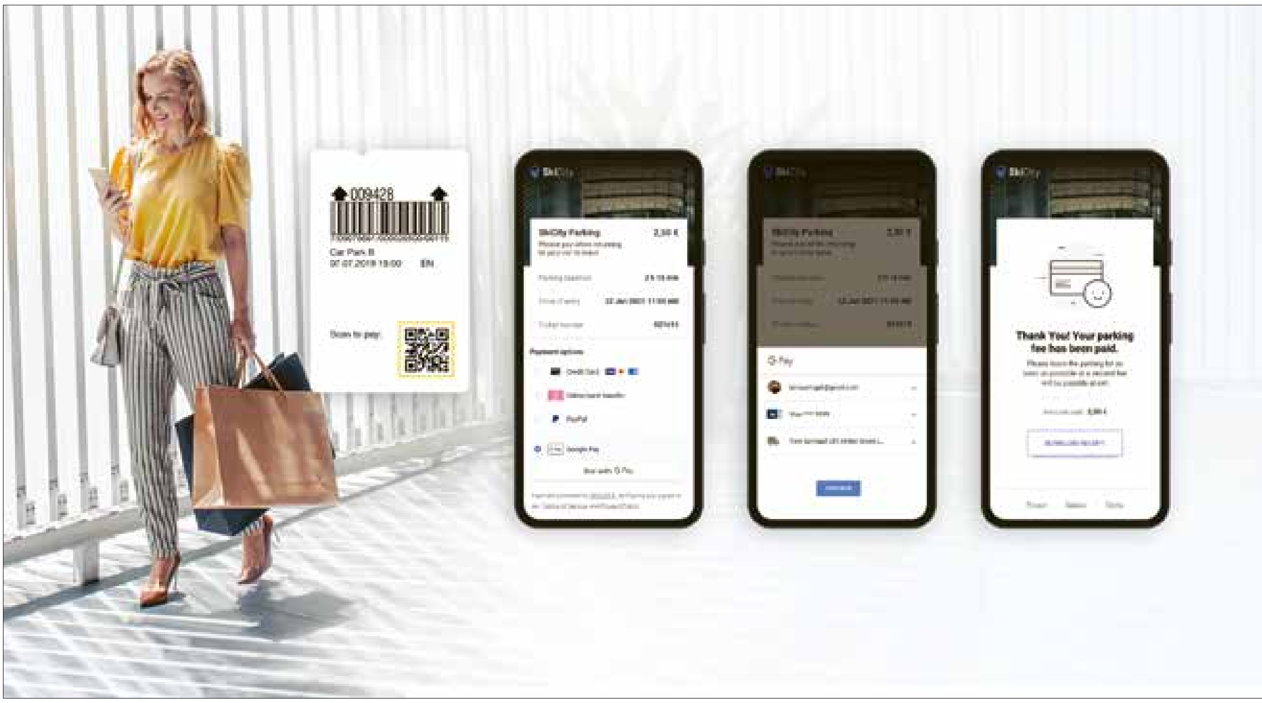
Transformation for sustainable, profitable growth

In late 2019, SKIDATA started a comprehensive transformation and restructuring program to set up the organization for long-term, sustainable and profitable growth. Actions included reconfiguration of the geographic footprint, optimizing worldwide collaboration, improvements in customer project management and inventory management as well as end-to-end orientation in product creation.

By the end of 2020 and despite the COVID-19 crisis, the measures taken led to a more agile adaptation to market environments with substantial improvements in cash flow, project delivery and service throughout the company, placing SKIDATA in a good starting position for 2021.

The Kitzbühel (KitzSki) resort adopted SKIDATA's Mobile Flow Solution in 2020

SKIDATA's face recognition access solution



sweb Mobile Pay solution for parking facilities

More than 40 years of customer insight-driven innovation

Setting standards in customer-focused access solutions and revenue management

Recognized global expertise with local representation

ACCESS SOLUTIONS DRIVEN BY FUTURE CUSTOMER NEEDS

› PUBLIC ACCESS

SKIDATA provides solutions for future customer requirements derived from relevant industry trends such as cloud transition, sustainability and increased security.

Touchless solutions and cloud transition

Over the past years, demand for cloud-based, safe access to parking facilities, ski destinations and event venues increased and the COVID-19 situation accelerated this trend. SKIDATA continues to drive the conversion to cloud-based e-commerce and security of these industries and has released solutions in each of its business units to address those needs.

Digitization is driving environmental protection

SKIDATA has developed digital solutions to reduce the use of plastic and paper tickets by enabling users to enter, pay and leave a parking facility with a smartphone ticket, go directly to a ski lift with a digital ski pass or attend a sports event with an electronic ticket. Where physical tickets are still needed, SKIDATA offers tickets produced with FSC-certified materials.

Prepared for the increasing presence of electric vehicles, SKIDATA offers completely integrated e-charge solutions for parking facilities, enabling parking operators to provide attractive bundle offers for e-mobility customers.

Safe Guest solution for event venues

Keycard pure – a piece of nature in your jacket

In October 2020, SKIDATA launched the new keycard pure – made of wood. The wood used for the manufacturing of the card comes exclusively from FSC-certified forests – a perfect example of replacing plastic materials with renewable primary products. The RFID card still maintains its regular functions. Placed in the sleeve or the breast pocket of one's ski jacket, it grants comfortable and touch-free access to ski lifts.

The new keycard pure access card made of wood

Touchless solutions for parking facilities

TOUCH-FREE TICKET SENSOR
Simply by raising one's hand in front of the entrance columns, a ticket prints and customers enter the parking area. In combination with touch-free payment options, such as sweb Mobile Pay, the parking experience turns completely touchless, instantly.

SWEB MOBILE PAY
Every guest with an online payment method on his or her mobile phone can use this service directly and easily without any additional app or registration. Once the payment has been completed, the customer exits directly with his or her ticket.

FREEFLOW SOLUTION
No contact with any device, no barrier, no queuing at the payment machine. Registered customers enter, stay and leave safely – completely contactless with SKIDATA's Freeflow solution. Payment is made digitally at entry or on a pay-later basis, which means maximum safety for the operator's revenues.

Touchless solutions for ski destinations

MOBILE FLOW SOLUTION
SKIDATA offers a brand-new alternative to the classic ski pass: a 100% digital version for both Android and Apple smartphones. The skiier buys it online, activates it once and then enjoys access to the skilifts all day long through Bluetooth technology, while the phone remains in the pocket.

Touchless solutions for event venues

SAFE GUEST SOLUTION
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-19 test program allowing entry only to people with negative test results provides safety and security for guests, staff and organizers.

2020 MARKET HIGHLIGHTS

KITZSKI BERGBAHN KITZBÜHEL AND SNOWSPACE SALZBURG

Famous destinations rely on SKIDATA

SKIDATA once again reinvented digital access to ski resorts by improving the experience and comfort of skiers. In a first field test at Snowspace Salzburg in February 2020, SKIDATA proved that the Mobile Flow solution works seamlessly for guests as well as operators.

In October 2020, the Bergbahn AG Kitzbühel (KitzSki) started to offer the Mobile Flow solution for the first time worldwide to their guests at the Kitzbüheler Horn. The 100% digital ski pass for both Android and Apple smartphones is perfect for millenials and digital natives. The skiier buys it online, activates it once and then enjoys access to the skilifts all day long through Bluetooth technology, while the phone remains in the pocket.

OSLO VINTERPARK, OSLO, SWEDEN

New ways to think about skiing and more

The Oslo Vinterpark is situated just 25 km away from the center of the Norwegian capital and only 4 km north of the famous ski-jump, Holmenkollen. Due to this unique location close to the nearly 700 000 inhabitants of the city, the operators of Oslo Vinterpark took a new path for selling entrance passes: guests should become members. They can visit the sporting area like a gym, regularly and not only to ski in winter or bike in summer, but also to meet friends and spend time.

As the site promises fun and action for the winter and summer seasons, it is no wonder that 30 000 guests signed up for the membership option during the first year. For the following year, the aim is to reach 50 000 members. The second step to a state-of-the-art skiing and sporting area will be the installation of the innovative and future-proof Mobile Flow solution in 2021.

RAKUTEN VISSEL KOBE STADIUM, HONSHU, JAPAN AND RAKUTEN EAGLES BASEBALL STADIUM, SENDAI, JAPAN

One sponsor – two stadia – 60 000 guests

The first game of the APC Soccer Champions League 2020 for Vissel Kobe in their home stadium was held on February 12th, 2020. The customer experience was improved with the new access control system delivered by SKIDATA, as 30 000 guests were benefiting from comfortable entrance solutions.

Just in time for the first home game of the Rakuten Eagles Baseball Team in Sendai on July 14th, the new SKIDATA access control system was fully operational. As earlier this year in Kobe, 30 000 guests securely entered the stadium passing SKIDATA's checkpoints.

DUKATEN PARKERING, CITY OF LINKÖPING, SWEDEN

Parking and eCharge solutions for a complete city

14 car parks in Linköping feature around 4 300 spaces; and 134 of them are e-Charge slots, showing a complete city relies on SKIDATA systems. Additionally, 4150 spaces across 13 garages are run with the SKIDATA license plate recognition system. In the Braxen garage with 150 spaces, the future-oriented Swedish city has implemented the Freeflow Solution.

This technology provides a much more user-friendly parking experience, where parkers benefit from seamless entry and exit without any barrier.

NORTH QUEENSLAND STADIUM, TOWNSVILLE, AUSTRALIA

A joint future-proof solution

The stadium is the new venue of sporting and entertaining events in North Queensland and is also home to the North Queensland Cowboys National Rugby League Team. The operator of the 20 000 seats stadium in Townsville, situated in the northeast of Australia, relies on SKIDATA people access. SKIDATA, Ticketmaster and Gunnebo built a future-proof access solution for the new stadium.

The three groups worked together on design, installation and commissioning of the system with successful results.


Cyber Fusion Center - Security Events

CYBERSECURITY

Solutions that help clients improve cybersecurity resilience, minimize risk and provide visibility into threats and data to enable secure business

HIGH VALUE SOLUTIONS FOR OPTIMAL CYBERSECURITY RESILIENCE

› CYBERSECURITY

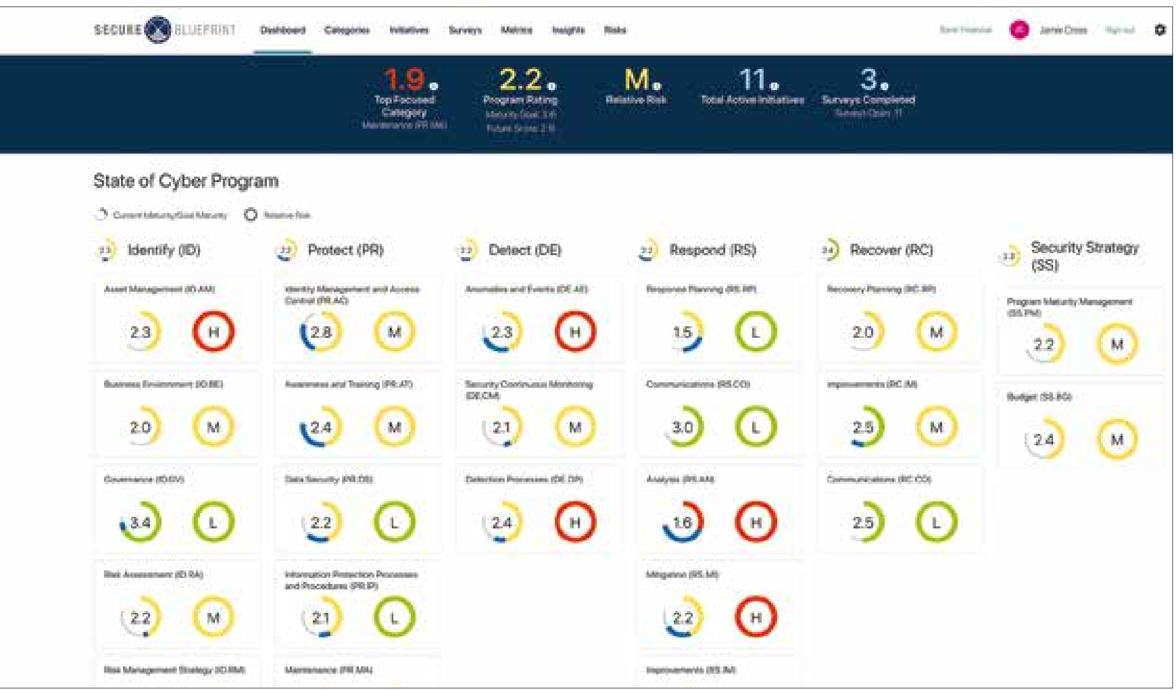
With business pressures associated with the pandemic increasing – ranging from accelerated digital transformation and increasing budgetary restrictions, to a growing frequency in cyber-attacks – a sustained focus on driving value has never been more critical.

Providing high-value solutions for optimal cybersecurity resilience

As the cybersecurity business of Kudelski Security evolves, a broader set of the company's capabilities are used to deploy comprehensive cybersecurity solutions that enable enterprise and government clients to assess, design, implement and operate security strategies effectively. Kudelski Security continues to see clients move away from one-off transactions to long-term, multi-year engagements.

These engagements increasingly span the full range of Kudelski Security's traditional lines of business – Managed Security Services, Advisory, Technology Consulting, and R&D – to offer a solution that delivers a greater impact than a point solution or transaction.

The starting point for many relationships is often focused security assessments that identify opportunities to develop a broader solution that can be implemented and often operated on behalf of the client over the course of several years. This helps improve the clients' cybersecurity resilience and reduce risk, provide access to market leading talent and technology, and distinguish Kudelski Security in its ability to provide high value solutions.



Managing and presenting Security Program Maturity with Secure Blueprint

Increased collaboration across the Group to broaden market value

Since its launch in 2012, Kudelski Security has positioned itself to respond effectively to the growing market demand for cybersecurity services. The focus of this activity has always been on delivering a broad set of differentiated services, proprietary technologies, and proven commercial products to provide tangible value for clients' cybersecurity investments, and quantifiable reduction to risk, while controlling costs.

Over the past five years Kudelski Security's business has matured, delivering rapid growth reflecting the increasing trust clients place in Kudelski Security. In 2020 it started to build on this success with an increased focus on collaboration across the Group, leveraging other Group businesses to extend Kudelski Security into industries and geographies where it previously has had limited access. This strategy should help open significant opportunities for Kudelski Security and expand the broader market value for the Group.

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:

– Continued security staffing shortages – Despite the changing work environments, talent shortages are expected to continue to be an issue during a time when cyber-attacks are also increasing. Instances of ransomware, for example have shown a marked increase during the pandemic. This further strains the competition for talent and highlights the need for Kudelski Security solutions that either reduce human involvement or increase efficiencies.

– Increased 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-home economy expands, CISOs will look to invest more in cloud security, communication security, and security awareness training.

– Broader 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 create new attack vectors that will need securing, forcing organizations to reexamine security practices, and implement new policies and procedures to reduce risks.

– Cutting-edge technology – The potential of artificial intelligence, machine learning and automation provides the opportunity to decrease unit costs and dependencies on hard-to-find cybersecurity professionals, while the overall demand will continue to grow. The prevailing economic situation, however, will mean that even within automation the focus will be on leveraging public cloud platform capabilities.

Kudelski Security Cyber Fusion Center, the next-generation security operations center, Cheseaux-sur-Lausanne, Switzerland

Kudelski Security client portal for all Managed Security Services

2020 MARKET HIGHLIGHTS

Securing the cloud journey

Given changing requirements of the pandemic, many organizations are fast-tracking digital transformation to adapt to the work-from-home economy. 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 2020 Kudelski Security launched strategic partnerships with the leading providers of public cloud services: Microsoft, Google, and Amazon. Mid-year, the company 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.

Removing complexity with Managed Security Services

In 2020, Kudelski Security's Managed Security Services (MSS) delivered an exceptional performance, with a high double-digit growth rate driven by strong activity in Europe and notable expansion into the operational technology (OT) and industrial control system (ICS) space. Throughout the year, increased demand for emergency breach response services validated Kudelski Security's decision to embed Incident Response Retainers (IRR) into its MSS, providing an optimal structure for streamlined activity and more rapid response to incidents.

At the core of Kudelski Security's MSS is a Managed Detection and Response (MDR) offering that improves the speed and quality of threat detection, analysis, investigation and response while reducing exposure to risks and increasing awareness of threats. MDR continues to be the strongest performing sub segment within MSS as organizations seek more tangible, quantifiable results in risk reduction and cyber maturity.

In 2020, Kudelski Security's Managed Security Services were further validated by a new round of recognition from leading industry analyst firms:

- The Forrester Wave: Midsize Managed Security Services Providers (MSSPs), Q3 2020. (Listed as Market Leader)
- Forrester Now Tech: Global and Emerging Managed Security Service Providers, Q2 2020
- Forrester Now Tech: European Cybersecurity Incident Response Services, Q1 2020
- Gartner Market Guide for Managed Detection & Response Services, 2017, 2018, 2019, 2020
- Gartner Market Guide for Managed Security Services, Q4 2020
- Forrester Now Tech: Managed Detection and Response Services, Q4 2020

Supporting the Chief Information Security Officers (CISOs)

Kudelski Security's support to CISOs centers on enabling them to lead the strategic security organization and create an organizational culture of shared ownership of cybersecurity risk. Through 2020, Kudelski Security has aligned its focus to the circumstances arising from the work-from-home economy and the dissolution of the security perimeter. Such support includes a renewed emphasis on security awareness training, penetration testing, and third-party risk management.

2020 also saw a rise in demand for CISO engagements and staff augmentation to help avoid leadership gaps. In this context, Kudelski Security published its second CISO community research project, "Cyber Business Executive Research: Building the Future of Security Leadership", which provides practical advice and strategies on how to deal with the challenges and mitigate the risks associated with the global shortfall in security talent.

Secure Blueprint – improving risk and maturity monitoring

Launched in 2018, Secure Blueprint is a SaaS-based platform that automates key security management functions and enables the CISO to move from an operational perspective on security to a strategic approach. As a flagship offering, Secure Blueprint has been adopted globally by clients. In 2020, new modules on risk and maturity monitoring were introduced as well as new reporting functionalities.

Applied Security – keeping ahead of the curve

Applied security and research is the innovation engine of Kudelski Security. The Kudelski Group has over 30 years of experience in security and encryption and maintains an annual research and development budget of around US$150 million to anticipate future challenges and develop solutions for modern enterprises and government bodies. Research Centers, Advanced Laboratories and Secure Centers of Excellence, such as the Internet of Things and the Blockchain Security Center, continue to drive innovation across products and services that focus on emerging cybersecurity threat vectors.

Three main activities in 2020 warrant focus:

– Cryptographic audits and assessments. Kudelski Security continued to service a large number of clients in the cryptocurrency space, providing world-class expertise to audit, design and implement cryptographic codes. This activity has provided footprint in the Asian markets and places the company in a favorable position for future activity from across the business in the region.

– Quantum security. Toward the end of the year, Kudelski Security launched a dedicated focus on quantum security, including expanded research and advisory services that enable security leaders and product and system developers to align their long-term approach to risk and data protection to the era of quantum computing. A research paper, "Point of View on Quantum Security", was published during the fourth quarter.

– Digital asset custody. Kudelski Security adjusted the focus of its blockchain activities toward digital asset custody consulting. Digital asset custody provides trusted environment for digital asset transactions and safe storage of cryptographic keys that control those assets. As cryptocurrency moves further into the mainstream, all major financial institutions are set to include it in their offering portfolio. Leveraging its knowledge of the blockchain and cryptocurrency space, in 2020, Kudelski Security worked with major global actors to advise them on their selection and implementation of custody provider solutions.

Continued European expansion

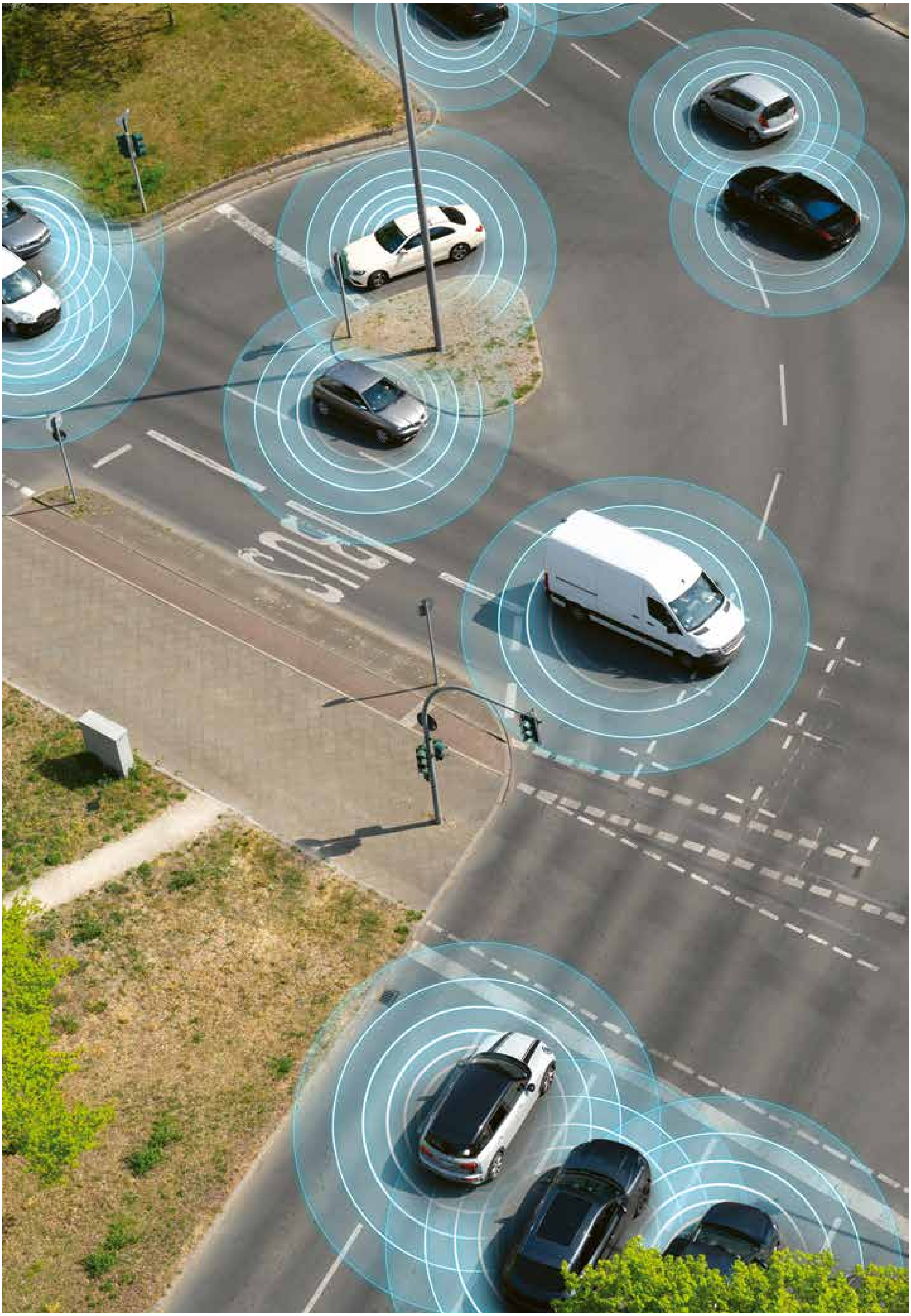
A major focus for the business in 2020 was the European expansion. Prior to 2020, the business had prioritized efforts to consolidate reach in Switzerland and increase its footprint in the German-speaking part of the country. The Swiss presence became a strong springboard for expansion into Germany, Austria and France, where Kudelski Security won significant long-term cybersecurity contracts. In the UK, the offices expanded their team to strengthen market position and bring the service proposition closer to the client.

Expansion activities were supported by sustained media effort, participation in key trade events, ongoing CISO-level guidance and strategic hires to provide localized, first-class consulting and security expertise.

Launch of global indirect sales channel

Kudelski Security launched a new channel program designed to access to a wider range of clients and increase the company's geographic reach, by making its services and resources available to networking and management consultancies, as well as IT distribution and reseller networks. In 2020, Kudelski Security signed the first agreements with a major global distributor, a niche service provider in the United States and a major reseller in Germany.

The sales channel also includes a program specific for the Kudelski Group's digital TV customers and their clients who operate as service providers, delivering business connectivity, networking and Internet services for enterprises.



INTERNET OF THINGS

Enabling, protecting and creating sustainable connected businesses

A STRATEGIC IOT SOLUTION PROVIDER

› INTERNET OF THINGS

The COVID-19 pandemic has accelerated digital transformation of businesses and governments in order to improve safety and health, enable employee productivity, make the supply chain more efficient and improve sustainability. But temporary closures and working from home have also accelerated hackers' attacks on the nascent digital world and exposed potentially serious threats to the success of the Internet of Things.

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.

Becoming 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 according to 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. By working with strategic IoT ecosystem partners, the Group is creating secure solutions that solve specific industry problems and are easy to adopt, easy to implement and simple to use.

Designing, securing and sustaining the entire IoT product lifecycle

Kudelski IoT provides end-to-end IoT solutions, IoT product design, and full-lifecycle services to IoT device manufacturers, ecosystem creators and end-user companies. 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.

Kudelski addresses security from a system, end-to-end perspective, protecting all aspects of the connected business' ecosystem, its devices, collected data, intellectual property and associated monetization models. The approach also incorporates Security Lifecycle Management that ensures that security is sustained throughout the lifetime of the device.

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, helping them design IoT devices and ecosystems, and providing end-to-end solutions for specific markets that are secure by design.

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.

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 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.

END-TO-END IOT SOLUTIONS
Tracking & Locating Valuable Assets
In addition to designing solutions for its customers, 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 launched development of its first asset tracking solution, RecovR, in 2020, and is actively investigating other applications of the technology where it can expand into in the future.

EXPANDED SERVICE OFFERING AND KEY PARTNERSHIPS

New leadership
Hardy Schmidbauer, a seasoned executive in the wireless, semiconductor and IoT sectors, was appointed Senior Vice President, IoT, in April 2020, assuming leadership of the Kudelski Group's IoT activities. He brings with him the experience of a 20-year career spanning project management, design engineering, marketing management, product management and entrepreneurship at companies like Silicon Labs and Semtech Corporation.

Expanded service offering and key partnerships
Created in 2017, the Kudelski Group's IoT Security Center of Excellence (CoE) continues to draw new customers who wish to leverage Kudelski's extensive expertise in hardware and software security as well as security architecture and design. It has now added both IoT security workshops and full end-to-end solution design to its portfolio.

In recognition of the CoE's capabilities, it was chosen by both Amazon as a certified Alexa Built-In Security Lab and AT&T as an IoT Security Lab for companies connecting their devices to AT&T's network.

New technologies and integrations
2020 also saw a key milestone in Kudelski IoT when it announced the availability the PICO SE-800 secure element, a security chip that is part of Kudelski IoT keySTREAM. PICO SE-800 provides IoT device manufacturers with a turnkey IoT security solution they can incorporate into their designs, enabling them to securely manage, control and update their IoT devices. SIM card specialist IDEMIA also announced the integration of Kudelski IoT keySTREAM into its product lines, enabling more robust IoT security for its customers.

New customer announcements
Kudelski IoT continued to serve a large number of customers in its IoT Security Center of Excellence, 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 semiconductor manufacturers, US and EU telecommunications companies and firms offering printing and tracking solutions.

Kudelski IoT also announced that it had contracted to deliver a passive keyless entry solution to California-based Canoo, an electric vehicle manufacturer.

End-to-is solutions – RecovR
RecovR, the first in a new line of end-to-end solutions that Kudelski IoT will launch, was first introduced in February 2021 at the National Automobile Dealers Association's digital trade show. RecovR is a two-in-one solution for car dealerships that places a small, battery-powered locator device in new cars in order to help them locate and manage their vehicle inventory more efficiently. Once 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.

Key industry alliances
IoT being an emerging technology, alliances play an important role in the standardization and interoperability of IoT solutions. To ensure access to key market players and influence over emerging standards, Kudelski IoT announced membership in utilities industry alliance DLMS (Device Language Message Specification) and low-power wide-area network consortium LoRa Alliance. It also announced support for Deutsche Telekom's IoT SAFE guidelines. Additionally, Kudelski IoT is actively participating in the IoT activities of the GSMA (Global System for Mobile Communication Association) through sister company NagraStar.

CANOO

Kudelski IoT partnered with Canoo, an electronic vehicle manufacturer based in California, to deliver a passive keyless access solution to vehicles with authorized mobile phone or other digital key option.

RecovR

In February 2021, Kudelski IoT launched RecovR, a new line of solutions based on a locator device for car dealerships to help them locate and manage their vehicle inventory.

IDEMIA

Kudelski IoT partnered with IDEMIA to create a first-to-market, SIM-based IoT security solution based on GSMA's IoT SAFE guidelines, simplifying IoT security for the entire ecosystem.

ublox

Kudelski IoT is working with u-blox, a global provider of leading positioning and wireless communication technologies for the automotive, industrial and consumer markets, to deliver joint solutions for secure IoT connectivity for cellular networks.

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 31 December 2020.

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 2 August 1999.

The structure of Kudelski SA and its affiliated companies (the “Kudelski Group” or the “Group”) is shown below – sections 1.1.1 - 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 (formally named iDTV for Integrated Digital Television), 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 into three teams: operations (including research and development, services and support), sales and marketing and data analytics.

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

The Cybersecurity division is organized around four pillars of activity: advisory services, technology resale, managed security services and proprietary research and development.

The Internet of Things (IoT) division is organized around IoT Solution (asset tracking), IoT Systems (keyStream) and IoT Services (Lab & design).

Results by sector are presented in note 4 to the Kudelski Group’s 2020 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 2020 financial statements.

Additional information is also included in the 2020 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, 2020, the market capitalization of Kudelski SA bearer shares was CHF 173 785 470.

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 2020 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	■	■		
	Slovenia	■			
	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 31 December 2020, 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 58.92% 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, 2020, the Kudelski Family outside the Pool held a total of 4.14% of the voting rights of Kudelski S.A. (see below). In its capacity as a protector of these trusts, Eigenmann Associés in Lausanne, Switzerland, 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 31 DECEMBER 2020	REGISTERED SHARES	BEARER SHARES	SHARE CAPITAL HELD	VOTING RIGHTS
Family Pool	46 300 000	10 662 923	27.80%	58.92%
Kudelski Family outside the Pool*		4 000 000	7.27%	4.14%

** On the 27th of June 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 31.12.2020

Ordinary capital

The share capital of Kudelski SA is CHF 439 612 704. It is divided into 50 321 588 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 15 April 2022 by a maximum amount of CHF 32 705 312 (representing 7.44% 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 83 937 344 (19.09% 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 3 937 344 (0.90% of the existing capital) through the issuance of a maximum of 492 168 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 (18.20% 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 31st, 2020, Kudelski SA had issued 51 012 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 2021, in accordance with Article 653h of the Code of Obligations. As of December 31st, 2020, the available amount of contingent capital for option and subscription rights was therefore CHF 3 529 248, representing a maximum of 441 156 bearer shares with a par value of CHF 8.00 each.

As of December 31st, 2020, 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	31.12.20	31.12.19	31.12.18
Registered share capital	37 040	37 040	37040
Bearer share capital	402 981	400 922	399 287
Legal reserve	110 000	110 000	110 000
Capital contribution reserve	71 467	74 216	79 689
Net profit	-28 845	-63 413	-57 418
Retained earnings	-6 810	24 785	88 198
TOTAL SHAREHOLDERS' EQUITY	**614 679**	**646 962**	**714 214**

For information relating to changes in capital which have taken place in 2020, 2019 and 2018, 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 2020 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 31st, 2020, 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 Kudelski SA's articles of association 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 2020 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 1st, 2021, 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 3.5.1- 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** Ecole polytechnique fédérale de Lausanne (EPFL), Switzerland	1987	15.04.2021
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	15.04.2021
PATRICK FŒTISCH Non-Executive Board Member	1933	Swiss	**DOCTORATE IN LAW** University of Lausanne, Switzerland **BAR EXAM**	1992	15.04.2021
LAURENT DASSAULT Non-Executive Board Member	1953	French	**DEGREE IN BUSINESS LAW** **DEGREE FROM ESLSCA** Ecole supérieure libre des sciences commerciales appliquées, Paris, France	1995	15.04.2021
PIERRE LESCURE Non-Executive Board Member	1945	French	**DEGREE IN LITERATURE AND JOURNALISM** Centre de formation des journalistes, Paris, France	2004	15.04.2021
MARGUERITE KUDELSKI Non-Executive Board Member	1965	Swiss	**ENGINEERING DEGREE IN MICROTECHNOLOGY** **DOCTORATE IN MICROTECHNOLOGY** Ecole polytechnique fédérale de Lausanne, Switzerland **EXECUTIVE MBA** IMD Lausanne, , Switzerland	2006	15.04.2021
ALEC ROSS Non-Executive Board Member	1971	American	**DEGREE IN HISTORY** Northwestern University, USA	2014	15.04.2021
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	15.04.2021

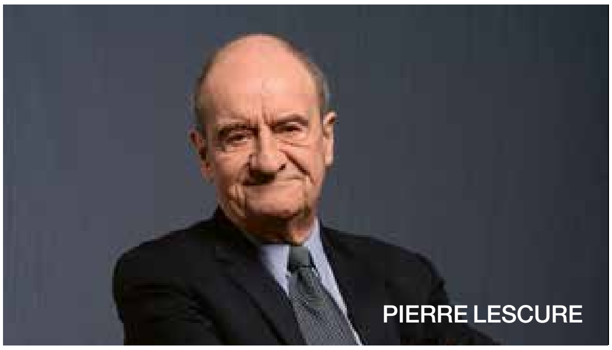
* *André Kudelski is the only member of the Board of Directors to combine his Board duties with an executive function within the Group (Chief Executive Officer). Apart from Mr. Kudelski, no other member of the Board of Directors performed any executive function within the Group during the past three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


ANDRÉ KUDELSKI


CLAUDE SMADJA


PATRICK FŒTISCH


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 SA, in Switzerland, Board Member and Chief Executive Officer
– NAGRA PLUS SA, in Switzerland, Chairman 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 AG, in Austria, Member of the Supervisory Board
– SmarDTV SA, in Switzerland, Chairman (until 31st of January 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, Vice-President
– Foundation Bilderberg Meetings, in Netherlands, member of Steering Committee
– Greater Phoenix Economic Council (GPEC), in USA, member of the Executive Committeee
– Innosuisse, in Switzerland, 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 30th of November 2018)

CLAUDE SMADJA

After 15 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 mandates in the Kudelski Group:

– Nagravision SA, 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 FŒTISCH

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 SA, in Switzerland, Chairman
– Nagra France SAS, Chairman
– NAGRA PLUS SA, in Switzerland, Board member
– SKIDATA AG, in Austria, member of the Supervisory Board
– SmarDTV SAS, in France, Chairman

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 mandates in the Kudelski Group:

– SKIDATA AG, in Austria, member of the Supervisory Board and, from the 1st of January 2021, Chairman of the Supervisory Board

Current mandates 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, Censor
– Immobilière Dassault SA, in France, Chairman of the Supervisory Board
– Groupe Industriel Marcel Dassault SAS, in France, Directeur Général Délégué and Board member
– Les Amis de la fondation Serge Dassault, in France, Chairman
– 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
– 21Centrale 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 Musée 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
– Organisation pour la prévention de la Cécité (OPC), Association, in France, Board member
– Société des Amis des musées d'Orsay & 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 Europe1 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 1st July 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

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
- Switzerland Innovation, foundation, in Switzerland, member of the Expert Committee
- Wire Art Switzerland SA, in Switzerland, Board member

Apart from the mandates and functions mentioned above, neither Ms. 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 United States, 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 Italia. He is currently writing a book about the 2020s which will publish in September 2021.

Main mandates outside the Kudelski Group:

- Amida Technology Solutions Inc. (USA), Advisory Board member
- Amplo (USA), Board Partner
- Jobbatical Inc., in Estonia, Supervisory Board member
- Legalpad Inc., in USA, Supervisory Board Member
- Telerivet Inc., in USA, Board member
- Baltimore Community Foundation, in USA, Board of Directors
- Bologna Business School Foundation, in Italia, Board of Directors

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 Sorbonne Université. 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
- 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.

President (black) · *Member* (grey)

	AUDIT COMMITTEE	STRATEGY COMMITTEE	NOMINATION AND COMPENSATION COMMITTEE
André Kudelski		Member	
Claude Smadja	President	Member	Member
Laurent Dassault		Member	
Patrick Fœtisch			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.

<u>Strategy Committee</u>
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.

<u>Nomination and Compensation Committee</u>
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 2020, 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

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 97%. Meetings of the Board of Directors lasted on average four hours. Most Committee meetings lasted on average three hours. The auditor in charge of the internal audit attended parts that were relevant for him of the three Audit Committee meetings.

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 2020.

- 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 and Sales Officer, 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 entity makes available a platform of analytical services to the Executive Board and operational departments.

- Every month, the Controlling group prepares a number of reports which are made available to the management. Those reports are then adapted and sent 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, a report on the financial development of key projects and a monthly and quarterly report on the cash-flow situation 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.

– 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 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 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 an early phase of development and as such both fields of activities bring 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.

- 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, 2020, the Group has outstanding short-term financial debt of USD 48.2 million and long-term financial debt of USD 439.2 million, including a CHF 200 million bond maturing in 2022 and a CHF 150 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. Although the Group took measures to mitigate the impacts of the COVID-19 outbreak, we may not be able to continue those measures in the future, particularly if the pandemic continues for an extended period or its severity worsens, which could lead to increased costs, delays in fulfilling customer delivery obligations and decreased revenues. The future impact of the outbreak on the global economy and the Group's operations is highly uncertain and cannot be predicted, and there is no assurance that the outbreak will not have a material adverse impact on 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** Ecole 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 AND SALES OFFICER**	**High School Diploma** Glendora, CA, USA

ANDRÉ KUDELSKI

Please refer to section 3.1 above

MAURO SALADINI

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 1 February 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

- Nagravision SA, in Switzerland, Executive Board member (until 18th of January 2017)
- Nagra IP, Inc., in USA, Board member (until 28th of March 2019)
- Kudelski Corporate Holding, Inc., in USA, Board member (until 19th of February 2019)
- iWedia SA, in Switzerland, Chairman of the Board (until 18th of July 2019)

MORTEN SOLBAKKEN

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, 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 the 1st of January 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 SA, 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

- Conax Access Systems Pvt Ltd, in India, Chairman of the Board (until December 3st, 2017)
- NexGuard Labs France S.A.S., in France, Director (until December 13th, 2018)
- Open TV, Inc., in USA, member of the Board of Directors (until July 31th, 2019)
- Digital Video Norge Holding AS, in Norway, Chairman of the Board (until August 20th, 2020)
- Digital Video Health AS, in Norway, Chairman of the Board (until September 23rd, 2020)
- Techno Venture AS, in Norway, Chairman of the Board and Managing Director (until July 30th, 2020)
- Kudelski Norway AS, in Norway, executive Board member and Managing Director (until August 31st, 2020)

Other mandates:

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

NANCY GOLDBERG

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 and Sales 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 31st 2020, 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 2020 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: $33^{1/3}$% 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 15th April 2020 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 1 January 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 903 427 for auditing services for the year 2020. 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 2020 the sum of CHF 563 818 representing CHF 534 655 for tax advisory services and CHF 29 163 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

- 15 April 2021: Annual General Meeting, Cheseaux-sur-Lausanne

- 26 August 2021: 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 31 December 2020.

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 United States, 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 paragraph 4, 31 and 32 of the articles of association (https://www.nagra.com/sites/default/files/STATUTS%20Kudelski%202021_02_24.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 2020

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 2020 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 2020

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 40.0% and 55.0% 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.

Mr. Pierre Roy retired from the Executive Board effective as of the 1st of August 2019. To ensure the smooth transition of job responsibilities to his successor, Ms. Nancy Goldberg, Mr. Roy remained as an employee working at 20% from the 1st of August 2019 to the 31st of January 2020. The elements of his compensation for 2019 were the same as those described in section 4.2 of this Compensation Report, except 1) his variable compensation was primarily based on his activities through 31st of July and was paid entirely in cash and 2) his fixed salary was pro-rated at 20% for the transitional period. The compensation paid to Mr. Roy related to this transitional period is described specifically in section 7 below (Years 2020 and 2019/ former management member).

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 2020 and 2019 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. 171 891 (2019: 74 372 bearer shares were allocated to members of the Executive Board with a seven-year blocking period and 19 789 (2019: 19 277) with a three-year blocking period. Shares granted as part of variable compensation for fiscal years 2020 and 2019 were granted at the beginning of the respective following year.

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	–	–	–	5765	**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 the 1st of August 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 the 1st of January 2020 to the 31st of January 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.

YEAR 2019	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 2019 CHF
BOARD OF DIRECTORS						
KUDELSKI ANDRÉ Chairman	550 004	–	–	–	–	**550 004**
SMADJA CLAUDE Vice-chairman	130 000	–	–	–	6 190	**136 190**
DASSAULT LAURENT Member	63 333	–	–	–	2 545	**65 478**
FOETISCH PATRICK Member	60 000	–	–	–	78 509 **	**138 509**
KUDELSKI MARGUERITE Member	50 000	–	–	–	3 353	**53 353**
LESCURE PIERRE Member	120 000	–	–	–	5 644	**125 644**
ZELLER ALEXANDRE *** Member	–	–	–	–	–	–
ROSS ALEC Member	70 000	–	–	–	4 695	**74 695**
TOTAL BOARD MEMBERS	1 043 337	–	–	–	100 395	**1 144 272**

YEAR 2019	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 2019 CHF
MANAGEMENT						
KUDELSKI ANDRÉ CEO	587 795	2 403 637	35 000	133 424	136 931	**3 261 787**
OTHER MEMBERS****	1 683 436	980 620	58 649	242 865	149 408	**3 056 329**
TOTAL MANAGEMENT	2 271 231	3 384 257	93 649	376 290	286 339	**6 318 116**

YEAR 2019	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 2019 CHF
FORMER MANAGEMENT MEMBERS ******	52 458	–	–	–	9 990	**62 448**
FORMER MEMBERS	52 458	–	–	–	9 990	**62 448**

* *This section includes social security charges.*
** *Compensation paid for his legal services rendered to several Group companies.*
*** *Mr. Alexandre Zeller was a member of the Board of Directors until the 1st of March 2019, following his decision to join Lombard Odier as a Managing Partner.*
**** *Ms Nancy Goldberg became a member of the Executive Board on the 3rd of June 2019. Mr. Pierre Roy was a member of the Executive Board until the 1st of August 2019.*
***** *This section includes long service benefits and benefits in kind as well as expenditures constituting or increasing pension benefits.*
****** *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 the 1st of August 2019 to the 31st of December 2019.*

Two members of the management received their remuneration in USD. One member received part of the 2019 compensation in USD, which was converted using a 0.9937 exchange rate for 2019 and 0.9680 exchange rate for variable compensation paid in 2020. Another member received part of the 2019 compensation in NOK, which was converted using a 11.2997 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, 2020 and 2019, 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, 2020 and 2019, 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 2020.

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 2020 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, 24 February 2021

Enclosure:

- Remuneration report

PricewaterhouseCoopers SA, avenue C.-F. Ramuz 45, case postale, CH-1001 Lausanne, Switzerland
Téléphone: +41 58 792 81 00, Téléfax: +41 58 792 81 10, www.pwc.ch

FINANCIAL OVERVIEW AND STATEMENTS

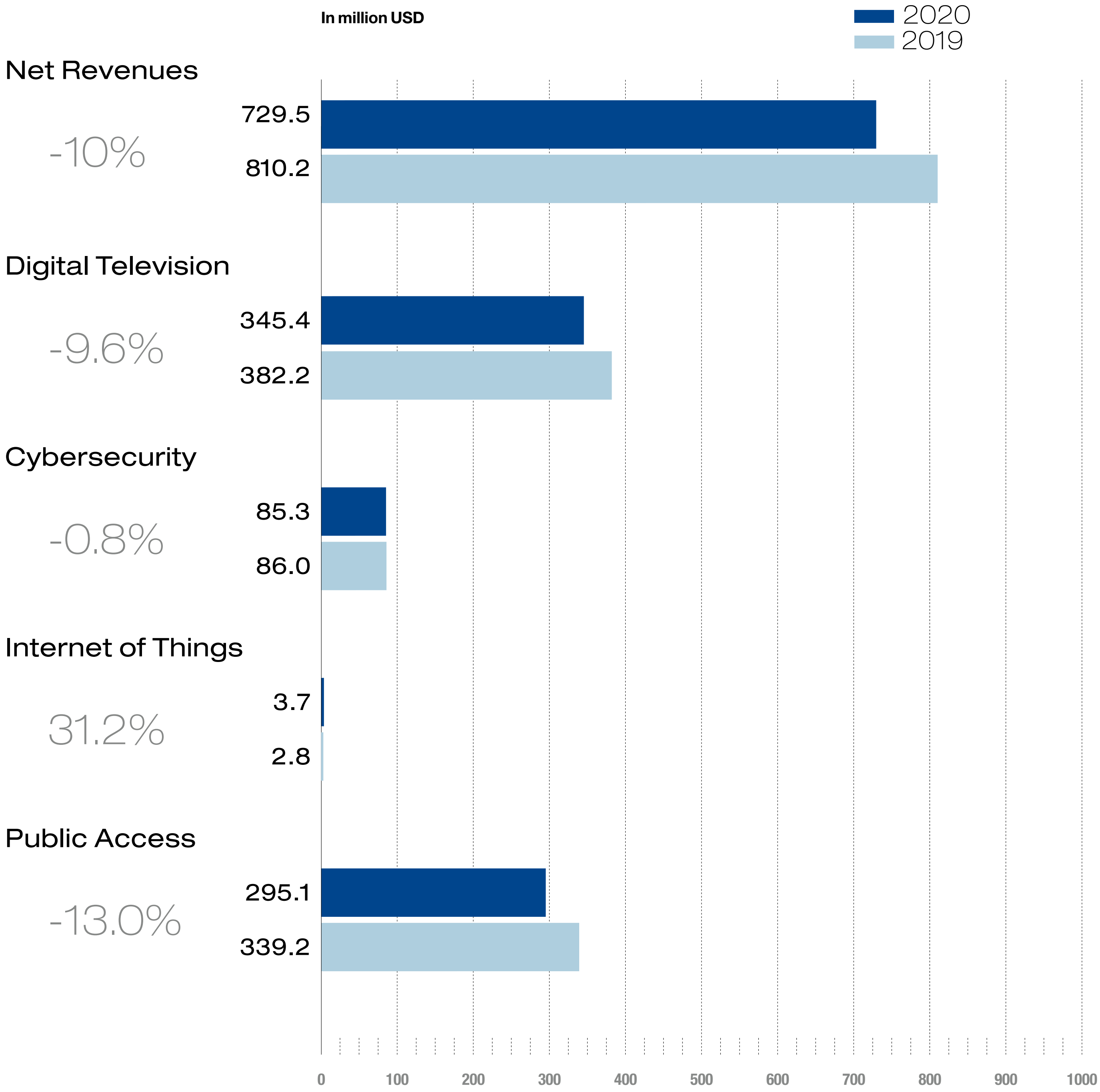
FINANCIAL OVERVIEW

In 2020, the Kudelski Group's total revenues and other operating income decreased to USD 741.5 million from USD 827.3 million in 2019. After a weak first half, Group sales strongly recovered in the second half producing a marginal decline of USD 5.3 million from the second half 2019, with cybersecurity and IoT revenues improving and Digital TV materially stable. Compared to the first half 2020, second half 2020 total Group revenues increased by USD 101.3 million, driven by higher sales in all segments.

The Group generated EBITDA of USD 64.3 million, a 58.5% or USD 23.7 million improvement from the previous year. This improvement reflects a strong second half where the Group generated USD 59.4 million, a USD 34.3 million improvement compared to the second half 2019. Overall, the Group generated an operating income of USD 16.1 million, compared to a loss of USD 15.3 million in 2019.

The Group generated USD 122.5 million of operating free cash flow, an improvement of USD 103.0 million from 2019. Working capital improvements drove 2020 cash generation, contributing USD 92.4 million.

GROUP REVENUES
BREAKDOWN BY SEGMENT



Impact of COVID-19

The COVID-19 pandemic affected demand for the Group's offerings. After a first half with materially reduced levels of activity in the Public Access and Digital TV markets, the resilience of the Group's businesses was better-than-expected in the second half of the year. Recovery of demand combined with the favorable impact of proactive cost control measures resulted in strong second half profitability and cash flows.

In the first half, some Digital TV operators lowered paywalls to compete with an increase in streaming activities. Revenues in the first half were also negatively impacted by the closure of retail markets, particularly in Italy. In the second half, Digital TV was more resilient than anticipated, benefitting from a robust recurring business and in spite of the negative impact of COVID-19 on the project side of the business. While key markets in Asia-Pacific and Latin America remained closed and under lockdown restrictions in the second half, resulting in continued pressure on revenues in these regions, the recurring Digital TV business in Europe overperformed compared to expectations with a strong momentum in the last quarter. Furthermore, growth areas such the Group's analytics business benefitted from new customer wins.

The onset of COVID-19 also brought disruption to the Group's Cybersecurity business, affecting the Group's ability to engage with clients, slowing sales activities and delaying delivery of services traditionally delivered in person. This had a negative impact on first half revenues in the US, which declined by 23.5% from the first half 2019. The second half 2020 saw a recovery of demand in the US, translating to a 13.9% revenue growth compared to the first half 2020. COVID-19 had virtually no impact on the pace of growth and expansion of the Cybersecurity business in Europe. The Group's 2020 European cybersecurity business grew by 57.4% from the previous year. The development of bookings points to the change of business momentum between the first and the second half: first half global Cybersecurity bookings declined by 10.4% compared to the second half 2019, while second half 2020 bookings strongly recovered, growing by 27.5% compared to the first half 2020.

Of our business units, Public Access was the most significantly affected by COVID-19, as large customers, including in particular airports, shopping centers and stadiums, postponed new deployments and asset refreshment projects. First half sales were severely affected, resulting in a 23.6% revenue decline. Service volume dropped to nearly 25% of normal volume in April and May due to shutdowns, reflecting reduced usage of the parking infrastructure. By the end of June, service volumes within Europe were recovering to approximately 90% of the prior year volumes with other regions averaging about 75%. This partial recovery led to a more resilient than expected second half. Compared to the second half 2019, Public Access second half 2020 revenues experienced a limited 4.5% decline. Overall, the negative effect of lockdowns on the usage of parking infrastructure and on the level of activities in the ski domain continue to affect SKIDATA's top line.

COVID-19 measures

The Group has implemented measures aimed at mitigating the impact of COVID-19 in the following areas: structural COVID-driven business adjustments, cost savings, cash flow optimization, and financing measures.

The Group swiftly adapted its structure and operations to the changed COVID-19 environment. In the second half, it integrated the learning from the first COVID-19 wave, ensuring full business continuity in spite of extended lockdowns. In addition, it adjusted its marketing and sales approach, in particular, increasingly leveraging digital channels.

With the onset of the pandemic, the Group implemented a set of measures aimed at temporarily reducing its cost base in order to align with the reduced levels of demand in the Public Access and Digital TV segments. Partial unemployment measures in several countries enabled the Group to reduce personnel costs. At the same time, the Group implemented structural measures to adapt its cost base to the reduced level of demand. At year end, the Group reduced overall headcount by 262 FTEs compared to the end of 2019. The Group also reduced travel costs by USD 16.5 million, a 52.5% decrease compared to 2019.

The Group took a very selective approach to capital expenditures, resulting in a reduction of cash flows used in investing activities from USD 14.9 million in 2019 to USD 8.9 million in 2020. As a further lever of cash generation, the Group managed to materially reduce working capital. Through working capital improvements, the Group released USD 92.4 million of cash in 2020, in particular with the implementation of measures aimed at accelerating the collection of outstanding invoices.

In 2020, the Group obtained COVID-related loans at favorable terms for a total amount of USD 29.9 million. Together with strong cash flow generation, these loans secured Group liquidity for 2021 and beyond.

Group results

In 2020, total revenues and other operating income decreased from USD 827.3 million to USD 741.5 million. Net revenues for the Group decreased by 10.0% to USD 729.5 million, a 10.6% decrease in constant currency, reflecting a decline of Digital TV and Public

Access sales. After a weak first half, with net revenues declining by USD 78.4 million compared to the previous first half, Group sales strongly recovered in the second half. Second half 2020 total Group revenues marginally declined by USD 5.3 million from the second half 2019, with cybersecurity and IoT activities growing and Digital TV materially stable. Compared to the first half 2020, second half 2020 total Group revenues increased by USD 101.3 million, driven by higher sales in all segments.

Other operating income decreased by USD 5.0 million to USD 12.1 million, due to a decrease of USD 3.3 million in government grants and the base effect from the one-time contribution in 2019 from the provision of services related to a past M&A transaction and attainment of an additional earn-out.

Margin after cost of material decreased from USD 572.0 million to USD 529.9 million. Relative to total revenues, margin after cost of material increased from 69.1% to 71.5%, as the Group achieved gross margin improvements across all segments.

Compared to 2019, the Group reduced personnel expenses by USD 39.5 million in 2020. Streamlining of Public Access' operations enabled the reduction of 168 FTEs, through the implementation of measures planned in the 2019 restructuring program. In addition, temporary headcount reduction measures in Public Access and Digital TV were a further driver enabling lower personnel expenses. At the end of the year, Group headcount was at 3'258 FTEs, representing a reduction of 262 FTEs compared to the end of 2019. Restructuring of SKIDATA US was the main driver of the 133 FTE reduction in the Americas. In Europe, the Group reduced headcount by 62 FTEs. The main locations driving this decrease were Austria and France. In Asia, the Group reduced FTEs by 67.

Compared to 2019, the Group cut USD 26.5 million of other operating expenses. COVID-related measures resulted in a USD 16.5 million reduction of travel expenses, USD 3.7 million savings in development and engineering, and USD 3.5 million reduction of building and infrastructure costs.

2020 operating expenses include one-off items related to the accounting treatment of the Swiss pension fund and expenses related to the ongoing SKIDATA restructuring. Newly adopted LPP 2020 assumptions include a revised demographic basis, resulting in a lower conversion rate for the Swiss pension fund. The lower conversion rate produced a positive USD 10.0 million effect on personnel costs. This positive effect mainly benefits the Digital TV segment. On the negative side, SKIDATA booked USD 5.2 million cost of material from the impairment of obsolete inventory. Further, SKIDATA booked a USD 2.5 million bad debt provision and USD 0.2 million negative revenue adjustment. Overall, these one-off effects result in a positive USD 2.1 million impact on Group's operating expenses.

The Group generated USD 64.3 million of operating income before depreciation and amortization, a USD 23.7 million improvement from the previous year. This improvement reflects a strong second half, in which the Group generated USD 59.4 million, an increase of USD 54.5 million compared to the first half. Compared to the second half 2019, second half EBITDA improved by USD 34.3 million. At USD 48.3 million, depreciation, amortization and impairment were USD 7.6 million lower than in 2019, as some assets were fully depreciated in prior reporting periods. Overall, the Group generated an operating income of USD 16.1 million, compared to a loss of USD 15.3 million in 2019.

At USD 10.4 million, interest expense was USD 0.2 million higher than in the prior year. The Group posted USD 14.8 million of net finance expense, due to net foreign exchange losses. The revaluation of intercompany positions and foreign exchange effects from USD-denominated working capital items booked in entities with a Swiss Franc functional currency result in these foreign exchange differences. These exchange differences have no impact on Group's cash flow. Income tax expense was USD 10.7 million, including, in particular, a one-off effect from the impairment of tax assets related to SKIDATA affiliates. The Group booked a USD 18.0 million net loss for 2020, compared to a loss of USD 38.6 million in the previous year.

Digital TV

Digital TV delivered a strong 2020, increasing EBITDA by USD 5.9 million to USD 96.9 million. In relative terms, EBITDA margin increased from 23.8% in 2019 to 28.1% in 2020.

2020 net revenues decreased by 9.6% to USD 345.4 million, representing a constant currency decline of 9.9%. Following a slow first half, second half segment revenues were in line with the second half 2019 and increased by USD 36.0 million from the first half 2020. Recurring revenues, particularly in advanced pay TV markets, enabled Digital TV resilience.

Digital TV also benefited from positive momentum in new product areas, including Insight, NexGuard watermarking, TVKey, OpenTV Platform and system integration services. Insight leverages big data and artificial intelligence to predict viewers' behaviors and suggests to operators smart actions to improve content and limit churn. In 2020, Altice and Canal+ adopted Insight, benefitting from its proven track record of profitability improvement. NexGuard protects high-value content in the early stages of the content supply chain (pre-release, digital cinema) and for operators. In addition to mitigating the economic impact of piracy on open Internet devices, NexGuard and the operational security services bundled with this platform provide forensic support for the identification of piracy sources and users, with a proven legal success track record in several jurisdictions. Liberty Global and RAI adopted NexGuard in 2020. TVKey seamlessly integrates the functions of traditional set-top boxes in TV sets, thus eliminating the need for additional devices. The Group is the sole partner of Samsung for the deployment of these devices. OpenTV Platform provides an end-to-end video platform supporting the seamless delivery of video content across broadcast and broadband channels. The platform is also available as a ready-to-deploy video solution for sports and was deployed by La Liga and the International Hockey Federation in 2020. Finally, the Group increasingly provides system integration services to operators such as Vodafone, though custom development projects supporting content providers and TV operators across the value chain. Aggregate 2020 revenues from these growth areas grew by 48% from the previous year to reach USD 40 million.

The Group's European Digital TV business posted 4.5% lower revenues compared to 2019. Most large European customers were resilient in spite of the COVID-19-related market turbulences. Notwithstanding such COVID-related impacts, the Group continues to grow its partnerships with large operators. For example, Vodafone continues to expand its footprint to additional European countries, relying on the Group's SSP (Security Services Platform) technology to integrate newly acquired operators in the Vodafone TV ecosystem.

At USD 124.5 million, the Americas business posted 13.3% lower revenues in 2020. COVID-19 negatively impacted Latin American markets, with large operators such as America Movil and Telefonica, in particular, putting on hold projects and substantially reducing smart card orders. The US Digital TV business, on the other hand, posted year-on-year growth, driven in particular by the further development of the Group's partnership with Altice. In 2020, Altice USA and Nagra have continued to extend their partnership on antipiracy. In addition, Altice continues to adopt Insight, the Group's business analytics platform to address subscriber churn and monitor and optimize quality of service and customer experience and deployed Nagra Protect, enabling a new generation of high-definition digital TV adapters.

The Asia Pacific and Africa region posted 13.4% lower revenues in 2020, as the COVID-19 crisis strongly affected this region's activity levels. In particular, full year revenues from Starhub, Essel and Foxtel declined by over USD 11 million in the aggregate. Following a weak first half, second half sales recovered and increased by 50.6% in the second half.

Digital TV margin after cost of material further improved from 88.5% to 88.7%. The USD 37.8 million reduction of operating expenses achieved in 2020 enabled the Group to sustain the segment's performance in spite of the negative impact of COVID-19 on Digital TV revenues, as the Group identified the changing market conditions early on and was fast in reacting to put in place appropriate cost control measures resulting in reduction of operating expenses. Compared to 2019 when the Group posted USD 23.4 million of restructuring costs, no such costs were booked in 2020, contributing to the material year-on-year improvement of the segment's cost base. In 2020, Digital TV generated USD 96.9 million of operating income before depreciation and amortization, representing a USD 5.9 million improvement from the previous year and USD 72.1 million of operating income, representing a USD 12.3 million improvement from 2019.

Cybersecurity

In 2020, Kudelski's cybersecurity business posted USD 139.9 million of gross revenues, a 2.0% increase from 2019. 2020 net revenues were at USD 85.3 million, representing a 0.8% decline from 2019. The Group's cybersecurity business continues to shift from lower margin technology reselling to the higher margin advisory, managed security services and proprietary technology business lines. In addition, revenue recognition policies are also impacting the segment's net revenue development. As the market is increasingly moving from on-premises to SaaS (software as a service) deployments, the segment recognizes lower revenues, as the reselling of on-premises equipment is typically booked on a gross basis, while the as-a-service business is generally booked on a net basis.

Margin after cost of material increased to USD 48.4 million, representing 22.6% growth from the previous year. In relative terms, margin after cost of material increased from 45.9% to 56.7%. The evolution of margin after cost of material provides the most relevant measure of the segment's performance, as this measure accurately reflects the development of the value-added component of the Group's cybersecurity business over time.

In 2020, the Group continued to expand its cloud-first cybersecurity portfolio supporting digital transformation initiatives of global enterprises using private and public cloud services. For example, in June 2020, it launched its dedicated Microsoft security services, enabling clients to effectively consume and configure Microsoft security capabilities and add additional monitoring to their Microsoft 365 and Azure environments.

The European region posted strong growth, increasing net revenues to USD 26.7 million, a 57.4% year-on-year improvement. In the Americas, revenues declined by 15.1% to USD 58.6 million. Following a first half of the year in which the US business was affected by a reduction of discretionary hardware sales due to the pandemic, in the second half, US revenues grew by 13.9% compared to the first half.

In 2020, the US cybersecurity business incurred expenses related to organizational changes. In addition, the Group continued to expand its European cybersecurity operations beyond the Swiss market strengthening its presence in France and Germany. As a result, the segment's operating expenses increased by USD 4.4 million compared to the previous year. The Cybersecurity segment posted a USD 17.5 million operating loss before depreciation and amortization, an improvement of USD 4.6 million from the previous year. At USD 6.0 million, second half operating loss before depreciation and amortization improved by USD 5.5 million compared to the first half.

Internet of Things (IoT)

In 2020, the Group significantly revamped its IoT operations to better take into account the early maturity stage of this market. Specifically, to complement the existing IoT Services (lab and design) and IoT Systems (centered around the keySTREAM platform) business lines, the Group added an IoT Solution business, which leverages existing Group assets to provide a fully deployable end-to-end asset tracking solution. RecovR, the new IoT Solution, is currently in a pilot phase with select customers and will be commercially deployed starting in the first half 2021. With this development, the Group addresses the requirement to provide a full end-to-end solution in addition to its customizable IoT security platform.

The Group launched a standalone IoT secure element, the Pico SE 800, allowing IoT device manufacturers to easily embed keySTREAM into their devices. Kudelski IoT partnered with ST to embed keySTREAM into ST Microelectronics' ST4SIM eSIM solutions and continued its partnership and integration into u-blox products and services. It also announced support for the GSMA's IoT SAFE initiative, which establishes guidelines for the use of mobile SIM cards to provide IoT security. In 2020, the Group won its first customer for its passive keyless access based on keySTREAM. The customizable passive keyless access platform provides drivers with access to vehicles using an authorized mobile phone or other digital key options. In the IoT Services domain, Kudelski IoT Labs became an Amazon authorized test lab for Alexa voice Services (AVS) for built-in devices.

2020 results reflect the initial benefits of this strategic refocusing. Full year revenues increased by USD 0.9 million to USD 3.7 million. Second half revenues more than doubled compared to the first half, still mainly driven by the IoT Services business. Refocusing IoT operations to high potential domains led to a reduction of operating expenses compared to the previous year. Overall, these developments translate to a USD 4.7 million reduction of the operating loss before depreciation and amortization compared to the prior year.

Public Access

COVID-19 significantly affected 2020 Public Access results, with revenues decreasing by 13.0% year-on-year to USD 295.1 million. The first half was mostly affected, with revenues declining by 23.6%, while the second half partially recovered, posting a 4.5% decline compared to the second half 2019.

At USD 175.8 million, European sales decreased by 7.6%. COVID-19 effects impacted most European markets, with the main revenue losses affecting France (USD 4.8 million decline), Germany (USD 4.1 million), and Italy (USD 2.5 million). COVID-19 also negatively impacted demand in the Americas, where SKIDATA is in the process of restructuring its US operations. COVID-19 mainly affected first half results. For the full year, American revenues declined by USD 8.9 million, with USD 16.2 million lower revenues in the first half and USD 7.3 million higher revenues in the second half. In the US market, revenues declined by USD 10.3 million in the first half and increased by USD 6.6 million in the second half. Public Access generated USD 36.0 million revenues in Asia/Pacific and Africa, a decline of 36.6% over the prior year. The Australian market delivered a weak 2020, with a USD 8.2 million revenue decline from the previous year.

Margin after cost of material relative to revenues increased from 56.5% to 58.1%. Public Access reduced 2020 operating expenses by USD 28.9 million compared to the previous year. In addition to temporary COVID-related actions, structural headcount reduction measures enabled these cost savings. Overall, Public Access generated an operating income before depreciation and amortization of USD 16.5 million, representing USD 8.5 million improvement compared to the prior year. For the full year, Public Access posted an operating loss of USD 1.2 million.

Balance sheet and cash flows

Total non-current assets decreased by USD 25.4 million to USD 670.4 million. The overall level of investments in tangible and intangible assets was lower compared to previous years. On the other hand, foreign exchange effects increased the USD value of assets denominated in foreign currencies. Tangible fixed assets increased by USD 0.9 million and intangible assets decreased by USD 8.0 million. Financial assets at amortized costs decreased by USD 13.6 million, reflecting a lower long-term portion of trade accounts receivables due to collection and reclassification to short-term of such receivables.

Compared to December 31, 2019, total current assets increased by USD 47.5 million to USD 533.9 million. The USD 6.3 million decrease of inventory is mainly due to a reduction of stock levels both at SKIDATA and within Digital TV. SKIDATA launched a supply chain restructuring program that is expected to drive a substantial reduction of its inventory balance. The Group decreased trade receivables by USD 29.9 million, as SKIDATA reduced outstanding receivables by USD 10.0 million. The main Digital TV entities reduced outstanding receivables by USD 16.2 million, benefitting from targeted measures aimed at preserving cash in the context of the COVID-19 pandemic. The Group reduced contract assets by USD 13.4 million to USD 44.6 million, as SKIDATA improved its invoicing cycles. Other current assets increased by USD 12.9 million to USD 38.5 million, driven by cybersecurity subscription software transactions delivered and accrued in 2020 but not yet invoiced.

At the end of 2020, cash and cash equivalents amounted to USD 152.6 million, representing USD 78.0 increase from December 31, 2019.

Total equity decreased by USD 34.4 million, mainly reflecting the USD 18.0 million net loss for the period, USD 10.2 million dividend paid to non-controlling interests and USD 5.7 million dividend paid to Kudelski SA shareholders.

Total non-current liabilities increased by USD 44.1 million to USD 530.8 million, with long-term financial debt growing by USD 46.2 million to USD 439.2 million, mainly driven by currency translation effects. Total current liabilities increased by USD 13.7 million to USD 317.3 million, with short-term financial debt decreasing by USD 25.5 million to USD 48.2 million, driven by a lower utilization of Kudelski SA and SKIDATA credit lines. Overall, the Group's primary interest-bearing liabilities include the CHF 200 million bond with a 1.875% interest rate maturing in August 2022, the CHF 150 million bond with a 1.5% interest rate maturing in September 2024, CHF 20 million of COVID-relief loans received by Nagravision and USD 50.5 million of bank debt at SKIDATA.

At the end of 2020, contract liabilities increased by USD 24.4 million, mainly reflecting a prepayment received from a Digital TV customer for services to be delivered and recognized as revenue in 2021. Other current liabilities increased by USD 16.6 million, to include VAT due on customer prepayments and accruals for amounts due to suppliers for cybersecurity products delivered in 2020 but not yet invoiced.

In 2020, the Group generated USD 132.6 million of cash flow from operating activities, representing a USD 98.4 million improvement from the previous year. Working capital improvements drove 2020 cash generation, contributing USD 92.4 million. In particular, the Group generated USD 64.8 million of cash flow from the reduction of accounts receivable and contract assets. The Group generated USD 41.9 million of operating cash flow in the first half and USD 90.7 million in the second half.

The Group used USD 8.9 million cash for investing activities, including USD 4.0 million to purchase intangible fixed assets and USD 6.7 million for tangible fixed assets. The Group reduced cash used for investing activities by USD 6.0 million compared to 2019.
Net cash-out for financing activities amounted to USD 52.3 million, compared to USD 30.4 million in 2019. The cash outflow includes USD 16.7 million payments of lease obligations, USD 10.2 million of dividends paid to non-controlling interests and the USD 5.7 million cash distribution paid to Kudelski SA shareholders. Net debt reimbursement for 2020 amounts to USD 19.9 million.

Outlook

In the Digital TV segment, the Group expects the positive momentum of the second half 2020 to continue into 2021, with stable year-on-year revenues. The European Digital TV business is expected to continue to maintain its strong resilience, while both the Latin American and Asian regions are expected to recover, following a challenging 2020. As the 2020 Digital TV segment cost base benefitted from the one-off positive effect from the IAS 19 plan amendment, the Group anticipates higher 2021 Digital TV operating expenses compared to 2020.

In the Cybersecurity segment, the Group expects growing 2021 revenues. As the Cybersecurity business continues to drive the development of higher margin product lines, margin after cost of material should continue to grow at a double-digit rate. Such positive momentum is expected to result in a material improvement of segment operating income before depreciation and amortization.

The launch of RecovR in Spring 2021 is expected to drive this year's IoT revenue growth, while the Group continues to promote IoT Services and the keySTREAM platform. The Group expects 2021 IoT revenues to at least double compared to 2020.

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. Segment plans for 2021 take these uncertainties into account. In 2021, the Group will continue to streamline SKIDATA's operations, seeking a tighter integration with other Group segments and corporate functions and among the SKIDATA local and central entities. In spite of the market uncertainties, the Group targets a material 2021 improvement of Public Access profitability.

CONTENTS

KUDELSKI GROUP CONSOLIDATED FINANCIAL STATEMENTS

KUDELSKI SA FINANCIAL STATEMENTS

CONSOLIDATED INCOME STATEMENTS
(FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019)

In USD'000	Notes	2020	2019
Revenues	4	729 492	810 201
Other operating income	5	12 057	17 076
Total revenues and other operating income		**741 549**	**827 277**
Cost of material, licenses and services		-211 675	-255 230
Employee benefits expense	6	-368 132	-407 617
Other operating expenses	7	-97 417	-123 850
Operating income before depreciation, amortization and impairment		**64 325**	**40 580**
Depreciation, amortization and impairment	8	-48 271	-55 850
Operating income		**16 055**	**-15 270**
Interest expense	9	-10 397	-10 182
Other finance income/(expense), net	10	-14 808	-1 705
Share of result of associates	16	1 894	1 901
Income before tax		**-7 256**	**-25 256**
Income tax expense	11	-10 732	-13 312
Net income for the period		**-17 989**	**-38 568**
Attributable to:			
- Equity holders of the company		*-23 202*	*-44 497*
- Non-controlling interests		*5 213*	*5 929*

Earnings per share (in USD)

Attributable to shareholders of Kudelski SA for bearer shares : basic and diluted (in USD)	12	-0.4220	-0.8130
Attributable to shareholders of Kudelski SA for registered shares : basic and diluted (in USD)	12	-0.0422	-0.0813

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

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019)

In USD'000	2020	2019
Net income	**-17 989**	**-38 568**
Other comprehensive income to be eventually reclassified into the consolidated income statement in subsequent periods:		
Currency translation differences	-2 725	-9 307
	-2 725	**-9 307**
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	753	18 461
	1 068	**18 461**
Total other comprehensive income, net of tax	**-1 657**	**9 154**
Total comprehensive income	**-19 646**	**-29 414**
Attributable to:		
Shareholders of Kudelski SA	-24 963	-35 300
Non-controlling interests	5 317	5 886

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

CONSOLIDATED BALANCE SHEETS

(AT DECEMBER 31, 2020 AND 2019)

In USD'000	Notes	31.12.2020	31.12.2019
ASSETS			
Non-current assets			
Tangible fixed assets	13	127 704	126 783
Intangible assets	14	399 358	407 410
Right-of-use assets	15	41 639	41 517
Investments in associates	16	7 007	6 309
Deferred income tax assets	17	50 858	57 785
Financial assets at amortized cost	18	40 817	54 395
Financial assets at fair value through comprehensive income	18	–	517
Financial assets at fair value through profit and loss	18	2 182	–
Other non-current assets	18	863	1 042
Total non-current assets		**670 427**	**695 758**
Current assets			
Inventories	19	59 197	65 463
Trade accounts receivable	20	184 476	214 397
Contract assets	20	44 582	57 956
Other financial assets at amortized cost	21	54 503	48 396
Other current assets	22	38 549	25 589
Cash and cash equivalents	23	152 584	74 596
Total current assets		**533 892**	**486 397**
Assets classified as held for sale	**36**	**12 777**	**11 497**
Total assets		**1 217 096**	**1 193 651**
EQUITY AND LIABILITIES			
Equity			
Share capital	24	337 295	335 101
Reserves		1 156	31 280
Equity attributable to equity holders of the parent		**338 451**	**366 381**
Non-controlling interests	25	30 580	37 037
Total equity		**369 031**	**403 418**
Non-current liabilities			
Long-term financial debt	26	439 192	393 029
Long-term lease obligations	15	29 599	28 491
Deferred income tax liabilities	17	3 195	4 282
Employee benefits liabilities	28	48 817	51 072
Other long-term liabilities	29	9 979	9 780
Total non-current liabilities		**530 781**	**486 654**
Current liabilities			
Short-term financial debt	30	48 212	73 679
Short-term lease obligations	15	13 720	15 548
Trade accounts payable	31	67 732	60 572
Contract liabilities	32	69 873	45 446
Other current liabilities	33	109 521	92 946
Current income taxes		4 383	9 085
Provisions for other liabilities and charges	35	3 842	6 302
Total current liabilities		**317 283**	**303 579**
Total liabilities		**848 064**	**790 233**
Total equity and liabilities		**1 217 096**	**1 193 651**

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

CONSOLIDATED CASH FLOW STATEMENTS

(FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019)

In USD'000	Notes	2020	2019
Net income for the year		**-17 989**	**-38 568**
Adjustments for net income non-cash items:			
- Current and deferred income tax		10 732	13 312
- Interests, allocation of transaction costs and foreign exchange differences		22 298	8 375
- Depreciation, amortization and impairment	8	48 271	55 850
- Share of result of associates	16	-1 894	-1 901
- Non-cash employee benefits (income) / expense		-4 832	6 015
- Deferred cost allocated to income statement		223	360
- Additional provisions net of unused amounts reversed		-747	1 512
- Non-cash government grant income		-5 883	-8 109
- Other non-cash (income) / expenses		-7 204	-6 675
Adjustments for items for which cash effects are investing or financing cash flows:			
- Other non-operating cash items		-263	958
Adjustments for change in working capital:			
- Change in inventories		11 402	-5 104
- Change in trade accounts receivable		64 827	58 806
- Change in trade accounts payable		5 747	-26 448
- Change in accrued expenses		5 579	-1 117
- Change in deferred costs and other net current working capital headings		4 807	-17 243
Government grant from previous periods received		11 873	2 985
Dividends received from associated companies	16	398	1 871
Interest paid		-9 259	-8 898
Interest received		335	1 011
Income tax paid		-5 834	-2 834
Cash flow from operating activities		**132 588**	**34 157**
Purchases of intangible fixed assets		-3 965	-3 338
Purchases of tangible fixed assets		-6 694	-13 651
Proceeds from sales of tangible and intangible fixed assets		524	–
Proceeds from sale of investment property		–	2 298
Divestment of financial assets and loan reimbursement		1 575	39
Acquisition of subsidiaries, cash outflow (net of cash acquired):			
- Payment arising from prior years business combinations		-344	-279
Cash flow from investing activities		**-8 903**	**-14 931**
Reimbursement of bank overdrafts, long-term loans and other non-current liabilities		-84 973	-31 463
Increase in bank overdrafts, long-term loans and other non-current liabilities		65 103	28 886
Payments of lease liabilities		-16 699	-16 966
Proceeds from employee share purchase program	39	102	85
Proceed from a partial sale of subsidiary not resulting in a loss of control		113	–
Dividends paid to non-controlling interests		-10 224	-5 390
Dividends paid to shareholders	38	-5 692	-5 508
Cash flow from financing activities		**-52 270**	**-30 356**
Effect of foreign exchange rate changes on cash and cash equivalents		6 573	-253
Net movement in cash and cash equivalents		**77 988**	**-11 383**
Cash and cash equivalents at the beginning of the year	23	74 596	85 979
Cash and cash equivalents at the end of the year	23	152 584	74 596
Net movement in cash and cash equivalents		**77 988**	**-11 383**

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

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019)

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, 2019		**333 456**	**79 892**	**-15 802**	**-2 998**	**11 643**	**36 541**	**442 733**
Net income		–	–	-44 497	–	–	5 929	-38 568
Other comprehensive income		–	–	18 461	–	-9 263	-43	9 154
Total comprehensive income		**–**	**–**	**-26 037**	**–**	**-9 263**	**5 886**	**-29 414**
Employee share purchase program	39	194	-72	–	–	–	–	123
Shares issued to employees	39	1 451	-576	–	–	–	–	875
Dividends paid to shareholders		–	-5 508	–	–	–		-5 508
Dividends paid to non-controlling interests		–	–	–	–	–	-5 390	-5 390
December 31, 2019		**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	38	–	-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**

Fair value and other reserves as of December 31, 2020 include kUSD -2 683 (2019: kUSD -2 998) 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 2020

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-

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

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 10 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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

(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-

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

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, 2019.

The IASB issued amendments to IFRS 3 Business Combinations that revised the definition of a business, which assist entities with the evaluation of when an asset or group of assets acquired should be considered a business. This amended standard is applicable to transactions entered into on or after January 1, 2020. The amended standard allows an entity to apply an optional concentration test to evaluate whether substantially all of the fair value of the gross assets acquired is concentrated in a single identifiable asset or group of similar identifiable assets. If this optional concentration test is met, the set of activities and assets is determined not to be a business.The adoption of this amended standard had no 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, 2021 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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

and future transactions that are likely to happen. Future transaction hedges are contracted according to treasury policy 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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

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.

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.

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 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	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 functions					-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**

In USD'000	Digital TV 2019	Public Access 2019	Cyber-security 2019	Internet of Things 2019	Total 2019
Revenues from external customers	382 199	339 218	85 962	2 822	810 201
Other operating income	11 400	5 615	–	62	17 076
Total segment revenue and other operating income	**393 599**	**344 832**	**85 962**	**2 884**	**827 277**
Cost of materials, licenses and services	-55 371	-152 935	-46 457	-467	-255 230
Operating expenses	-247 226	-183 915	-61 590	-23 607	-516 338
Operating income before depreciation, amortization and impairment	**91 002**	**7 982**	**-22 085**	**-21 190**	**55 709**
Depreciation, amortization and impairment	-31 250	-18 095	-5 796	-709	-55 850
Operating income - excluding corporate common functions	**59 752**	**-10 113**	**-27 880**	**-21 899**	**-140**
Corporate common functions					-15 129
Interest expense and other finance income/(expense), net					-11 887
Share of result of associates	846	1 055	–	–	1 901
Income before tax from continuing operations					**-25 256**
	31.12.2019	31.12.2019	31.12.2019	31.12.2019	31.12.2019
Total segment assets	**633 379**	**360 517**	**144 195**	**37 241**	**1 175 332**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

In USD'000	31.12.2020	31.12.2019
Total segment assets	1 183 832	1 175 332
Cash and cash equivalents	14 257	2 523
Other current assets	161	98
Financial assets and other non-current assets	6 069	4 201
Asset of disposal group classified as held for sale	12 777	11 497
Total Assets as per Balance Sheet	**1 217 096**	**1 193 651**

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	**2020**	**2019**	**31.12.2020**	**31.12.2019**
Switzerland	49 118	42 668	68 809	71 088
United States of America	218 088	226 823	257 077	256 157
France	49 591	60 163	10 494	10 563
Netherlands	43 449	48 073	1 274	1 617
Rest of the world	369 246	432 473	238 916	243 460
	729 492	**810 201**	**576 570**	**582 885**

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	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**
Europe	154 501	161 846	175 808	190 206	26 633	16 535	2 586	2 029
Americas	124 536	143 685	83 251	92 138	58 574	68 994	1 045	755
Asia and Africa	66 379	76 668	36 040	56 874	68	434	72	38
	345 416	**382 199**	**295 099**	**339 218**	**85 275**	**85 962**	**3 703**	**2 822**
Sale of goods	72 862	96 835	177 491	202 375	11 879	26 523	40	211
Services rendered	191 745	194 188	86 698	94 684	44 626	37 299	3 156	2 520
Royalties and licenses	80 809	91 176	30 910	42 159	28 769	22 140	508	91
	345 416	**382 199**	**295 099**	**339 218**	**85 275**	**85 962**	**3 703**	**2 822**

5. OTHER OPERATING INCOME

In USD'000	2020	2019
Government grants (research, development and training)	5 547	8 863
COVID-19 subsidies	793	–
Income from rental of property	4 309	4 487
Gains/(losses) on disposal of assets	259	-502
Contingent consideration received	–	1 000
Services rebilled to discontinued operation	–	2 000
Others	1 149	1 229
	12 057	**17 076**

6. EMPLOYEE BENEFITS EXPENSE

In USD'000	Note	2020	2019
Wages and salaries		305 468	325 748
Social security costs		43 047	46 711
Defined benefit plans expenses	28	1 347	11 803
Defined contribution plans expenses		8 262	8 513
Other personnel expenses		10 009	14 843
		368 132	**407 617**

7. OTHER OPERATING EXPENSES

In USD'000	2020	2019
Development and engineering expenses	10 290	14 034
Travel, entertainment and lodging expenses	14 885	31 365
Legal, experts and consultancy expenses	19 383	20 787
Administration expenses	24 813	21 799
Building and infrastructure expenses	10 706	14 235
Marketing and sales expenses	7 676	5 613
Taxes other than income tax	3 320	3 251
Change in provisions	872	4 667
Insurance, vehicles and others	5 471	8 100
	97 417	**123 850**

8. DEPRECIATION, AMORTIZATION AND IMPAIRMENT

In USD'000	Note	2020	2019
Land and buildings	13	2 528	4 638
Equipment and machines	13	9 767	11 281
Total depreciation and impairment of tangible fixed assets		**12 295**	**15 919**
Land and buildings	15	12 825	13 151
Vehicles, equipment and other	15	2 939	2 999
Total depreciation and impairment of right-of-use assets		**15 764**	**16 150**
Intangible assets	14	20 212	23 781
Total amortization and impairment on intangible fixed assets		**20 212**	**23 781**
Depreciation, amortization and impairment		**48 271**	**55 850**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

9. INTEREST EXPENSE

In USD'000	Note	2020	2019
Interest expense:			
- Bond 2015-2022	27	4 153	3 921
- Bond 2016-2024	27	2 503	2 363
- Net interest expense recognized on defined benefit plans	28	250	822
- Interest on lease obligations	15	1 416	1 592
- Other and bank charges		2 074	1 484
		10 397	**10 182**

10. OTHER FINANCE INCOME/(EXPENSE), NET

In USD'000	Note	2020	2019
Interest income		1 239	1 796
Net gains/(losses) on foreign exchange related derivative financial instruments		220	319
Net foreign exchange transaction gains/(losses)		-15 401	-1 865
Others		-865	-1 955
		-14 808	**-1 705**

11. INCOME TAX EXPENSE

In USD'000	Note	2020	2019
Current income tax		-146	-13 310
Deferred income tax	17	-8 028	1 574
Non-refundable withholding tax		-2 559	-1 577
		-10 732	**-13 312**

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	2020	2019
Income before tax	**-7 256**	**-25 256**
Expected tax calculated at domestic tax rates in the respective countries	1 719	3 422
Effect of income not subject to income tax or taxed at reduced rates	2 759	2 489
Effect of tax restructuring	–	-2 331
Effect of utilization of previously unrecognized tax asset on tax losses carried forward and temporary differences	7 462	3 185
Effect of temporary differences and tax losses not recognized and deferred tax assets written-off	-19 975	-16 441
Effect of changes in tax rates	-6	-294
Effect of associates' result reported net of tax	90	468
Effect of disallowed expenditures	-2 400	-4 353
Effect of prior year income taxes	870	668
Effect of non-refundable withholding tax	-2 559	-1 577
Other	1 308	1 452
Tax expense	**-10 732**	**-13 312**

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 1 454 (2019: kUSD 1 385) and is included in 'Other' in the above table.

In response to the COVID-19 pandemic, various tax authorities have allowed for carryback treatment of operating losses to generate a refund of previously paid income taxes. As a result, the Group recognized a tax benefit of kUSD 3 635 in the United States which is included above in 'effect of utilization of previously unrecognized tax assets on tax losses carried forward and temporary differences'. In Austria, the Group recognizes a tax refund of kUSD 1 426 due to operating losses incurred in 2020. This item has no effect on the above table.

During 2019, the Group transferred the entrepreneurship of Conax operations in Norway and the ownership of the Conax subsidiary in India to other Group companies. As a consequence, the difference of tax rate applied between the gain realized and the elimination of the transferred assets between the companies, together with the withholding tax incurred on the transfer, resulted in a tax expense of kUSD 2 331 which is shown under 'Effect of tax restructuring' in the table above.

The weighted average applicable tax rate increased from 13.6% in 2019 to 23.7% in 2020. The increase 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	2020	2019
Net income attributable to bearer shareholders	-21 248	-40 733
Net income attributable to registered shareholders	-1 954	-3 764
Total net income attributable to equity holders	**-23 202**	**-44 497**
Weighted average number of bearer shares outstanding	50 354 857	50 103 651
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)	-0.4220	-0.8130
Attributable to shareholders of Kudelski SA for registered shares : basic and diluted (in USD)	-0.0422	-0.0813

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

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

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, 2019	**21 509**	**109 577**	**15 848**	**96 800**	**17 197**	**260 931**
Additions	2 493	886	1 003	7 518	1 752	13 651
Disposals and retirements	–	-5	-226	-3 429	-1 835	-5 495
Currency translation effects	323	677	-12	150	40	1 178
Reclassification & others	–	–	-444	1 016	1 040	1 613
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	-8 868
Currency translation effects	1 636	7 456	526	8 321	692	18 631
Reclassification & others	–	–	72	-2 698	2 616	-11
As of December 31, 2020	**25 961**	**120 185**	**16 879**	**104 859**	**20 440**	**288 324**
ACCUMULATED DEPRECIATION AND IMPAIRMENT						
As of January 1, 2019	**–**	**-42 352**	**-9 629**	**-68 967**	**-11 806**	**-132 754**
Systematic depreciation	–	-2 868	-1 770	-8 358	-2 306	-15 302
Impairment	–	–	–	-260	-357	-617
Disposals and retirements	–	–	145	2 923	1 488	4 555
Currency translation effects	–	-457	-14	-460	-46	-977
Reclassification & others	–	–	38	-20	-19	–
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 December 31, 2020	**–**	**-50 550**	**-12 767**	**-81 650**	**-15 654**	**-160 621**
Net book values as of December 31, 2019	**24 325**	**65 457**	**4 941**	**26 911**	**5 150**	**126 783**
Net book values as of December 31, 2020	**25 961**	**69 635**	**4 112**	**23 209**	**4 787**	**127 704**
Useful life in years	Indefinite	10 – 50	4 – 8	4 – 10	4 – 7	

In USD'000	31.12.2020	31.12.2019
Corporate buildings on land whose owner has granted a permanent and specific right of use	12 497	13 708

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. During 2020, the Group revised the residual value of its buidlings located in Cheseaux, Switzerland to better reflect the current estimates of such buildings upon retirement. This change was accounted for as a change in estimate. Based on the current book values of the assets, this change results in an annual decrease of depreciation expense of kUSD 1 873 in the current year. The impact for future periods varies based on the useful lives of the different building components comprised between 10 to 50 years.

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, 2019	**129 915**	**71 570**	**95 387**	**353 217**	**431**	**650 521**
Additions	927	292	2 119	–	–	3 338
Disposals and retirements	-16 547	-20	-1 193	–	–	-17 760
Reclassification & others	-1 613	-49	49	–	–	-1 613
Currency translation effects	282	-492	1 242	-1 972	-5	-944
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 December 31, 2020	**124 601**	**72 210**	**72 705**	**357 332**	**471**	**627 317**
ACCUMULATED DEPRECIATION AND IMPAIRMENT						
As of January 1, 2019	**-114 782**	**-34 324**	**-69 264**	**–**	**-426**	**-218 797**
Systematic amortization	-4 834	-8 902	-9 491	–	-5	-23 232
Impairment	-345	-12	-191	–	–	-548
Recovery of amortization on disposal and retirements	16 531	20	1 189	–	–	17 740
Currency translation effects	-459	241	-1 082	–	5	-1 295
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 December 31, 2020	**-114 714**	**-52 034**	**-60 749**	**–**	**-463**	**-227 959**
Net book values as of December 31, 2019	**9 076**	**28 324**	**18 763**	**351 246**	**0**	**407 410**
Net book values as of December 31, 2020	**9 886**	**20 176**	**11 956**	**357 332**	**8**	**399 358**
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. The impairment of Technology assets in 2019 was due to commercial initiatives abandoned during the year. The impairment of Software assets in 2020 and 2019 relate to ERP systems that were discontinued.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

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:

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					

2019	Carrying amount	Period of cash flow projections	Annual sales growth	Annual margin evolution	Terminal growth rate	Pre-tax discount rate
Goodwill CGU						
Digital TV	214 666	5 years	-5% to 3%	Declining	1.5%	9.00%
Public Access	35 701	5 years	1% to 5%	Stable	2.0%	10.25%
Cybersecurity	65 001	5 years	14% to 23%	Improvement	2.2%	9.00%
IoT	35 878	5 years	28% to 150%	Improvement	2.2%	9.00%
	351 246					

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
Cybersecurity revenue and gross profit projections are based on segment management's assumed development of the segment's business lines for each key market. Projections are subsequently adjusted at the Group management level to include contingencies related to the uncertainties of the business development. Margin assumptions are derived from current pricing trends and are based on the ongoing shift of product mix towards higher value-added business pillars including advisory and managed security services. Operating cost assumptions are forecasted based on anticipated business actions and business outlook over the planning period.

In 2020, Cybersecurity gross profits were in line with the previous business plan, as the segment continues to see a shift of business mix from low-value reselling of on-premise solutions to software based and service deployments as well as managed security and advisory servics. In 2021, Cybersecurity is expected to continue benefitting from this trend 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 a completely new business plan. In the new plan, the focus shifts from 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.

IoT revenue projections have been developed by the segment management based on forecast volumes and prices for existing customers and prospects. 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 development of a cost base required to deploy its product portfolio.

In 2021, the Group expects segment revenues to take off, more than doubling compared to the prior year. 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. 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.

Operating cost assumptions are based on historical expenditures and projected based on anticipated business actions and outlook over the forecast period. During 2020, 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 are expected to progress throughout 2021. Such measures are aimed at improving Public Access structural profitability and cash flow generation.

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 18.5% reduction of the assumed annual growth rate in the Cybersecurity segment and a 14.7% 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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

15. LEASING

In USD'000	31.12.2020	12.31.2019
Land and buildings	37 028	35 962
Vehicles, equipment and other	4 611	5 555
	41 639	**41 517**

In USD'000	Land	Building & leasehold facilities	Vehicles	Equipment	Other leases	Total
GROSS RIGHT-OF-USE ASSETS						
As of January 1, 2019	**–**	**–**	**–**	**–**	**–**	**–**
Change in accounting policy	786	46 342	5 748	203	36	53 115
Additions	–	3 819	2 640	–	–	6 459
Disposals and retirements	–	-2 220	-381	-2	-36	-2 639
Currency translation effects	-15	-406	-47	-3	–	-471
As of January 1, 2020	**770**	**47 535**	**7 961**	**198**	**–**	**56 464**
Additions	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 December 31, 2020	**1 024**	**56 357**	**9 006**	**206**	**–**	**66 592**
ACCUMULATED DEPRECIATION AND IMPAIRMENT						
As of January 1, 2019	**–**	**–**	**–**	**–**	**–**	**–**
Systematic depreciation	-38	-13 113	-2 907	-56	-36	-16 150
Recovery of depreciation on disposal and retirements	–	835	369	2	36	1 243
Currency translation effects	–	-26	-12	–	–	-38
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 December 31, 2020	**-90**	**-20 263**	**-4 491**	**-110**	**–**	**-24 953**
Net book values as of December 31, 2019	**732**	**35 230**	**5 411**	**144**	**–**	**41 517**
Net book values as of December 31, 2020	**934**	**36 094**	**4 514**	**96**	**–**	**41 639**
Useful life in years	4 – 10	5 – 10	2 – 5	2 – 5	2 – 5	

Lease costs are recorded in the income statement as depreciation expense in the amont of kUSD 15 764 (2019: kUSD 16 150) and interest expense of kUSD 1 416 (2019: kUSD 1 592), and are recognized in the cash flow statement as adjustments to net income non-cash items in operating activities. Lease payments of kUSD 16 699 (2019: kUSD 16 966) 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 5 830 (2019: kUSD 5 935) and low-value leases of kUSD 218 (2019: kUSD 267) remain fully recognized as an operational expense. The total cash outflow for leases in 2020 was kUSD 24 163 (2019: kUSD 24 760).

The Group's remaining contractual maturities of lease obligations at December 31, 2020 and 2019 are as follows:

In USD'000	2020	2019
Within one year	13 720	15 548
In the second to fifth year inclusive	24 340	25 283
More than five years	5 259	3 208
	43 318	**44 039**

16. INVESTMENTS IN ASSOCIATES

In USD'000	2020	2019
At January 1	**6 309**	**6 191**
Share of profit	1 894	1 901
Dividends received	-398	-1 871
Reclassification to fair value through profit and loss	-1 073	–
Currency translation effects	274	89
At December 31	**7 007**	**6 309**

The Group's interests in its principal associates, all of which are unlisted, were as follows:

		Interest held	
Name of associate	**Principal activity**	**2020**	**2019**
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%
Kryptus Segurança da Informaçao Ltda.	Cyber Security activities	*	16%

*During 2020, the Group's interest in Kryptus Segurança da Informaçao Ltda. was diluted and therefore the Group has determined that it no longer has significant influence over this entity.

SUMMARIZED FINANCIAL INFORMATION OF THE GROUP'S ASSOCIATES

In USD'000	31.12.2020	31.12.2019
Total assets	40 472	38 070
Total liabilities	21 627	22 438
Net assets	18 845	15 632
Group's share of associates' net assets	6 422	4 952

	2020	2019
Revenue	49 003	46 505
Result of the period	5 683	6 494
Group's share of associates' result for the period	1 894	1 901

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

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	31.12.2020	31.12.2019
Deferred tax assets	50 858	57 785
Deferred tax liabilities	-3 195	-4 282
	47 663	**53 504**

Movement on the deferred income tax account is as follows:

In USD'000	Note	2020	2019
At January 1		**53 504**	**54 734**
Exchange differences		2 319	116
Recognized against other comprehensive income		-131	-2 921
Income statement (expense)/income	11	-8 028	1 574
At December 31		**47 663**	**53 504**

The movement in deferred tax assets and liabilities during 2020, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

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**

And for 2019:

In USD'000	At January 1, 2019	Income statement effect	Other Comprehensive income	Currency translation effects	At December 31, 2019
Deferred tax assets associated with					
- intangibles	5 001	-1 392	–	49	3 658
- employee benefits	9 115	821	-2 946	33	7 023
- tax losses	38 425	42	–	76	38 543
- provisions and other elements tax deductible when paid	7 183	1 138	25	-21	8 325
- intercompany profit elimination	5 160	336	–	-109	5 388
- others	818	-174	–	-16	628
Total deferred tax assets (gross)	**65 703**	**771**	**-2 921**	**12**	**63 565**
Deferred tax liabilities associated with					
- intangibles	-5 817	835	–	63	-4 919
- provisions and accelerated tax depreciation	-4 268	146	–	24	-4 097
- leases	–	-169	–	-1	-169
- others	-884	-9	–	17	-876
Total deferred tax liabilities (gross)	**-10 969**	**803**	**–**	**104**	**-10 061**
Net deferred tax asset/(liability)	**54 734**	**1 574**	**-2 921**	**116**	**53 504**

UNRECOGNIZED TAX LOSSES CARRIED FORWARD

At the balance sheet date, the Group has unused tax losses and temporary differences of mUSD 1 421.3 (2019: mUSD 1 440.0) available for offset against future profits. A deferred tax asset has been recognized in respect of mUSD 370.7 (2019: mUSD 475.8) of such losses and temporary differences. No deferred tax asset has been recognized for the remaining mUSD 1 050.6 (2019: mUSD 964.2) 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	2020	2019
Expiration within:		
One year	40.0	38.8
Two years	29.1	36.2
Three years	28.9	44.7
Four years	129.1	31.1
Five years	152.5	120.4
More than five years	671.0	693.0
Total	**1 050.6**	**964.2**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

18. FINANCIAL ASSETS AND OTHER NON-CURRENT ASSETS

In USD'000	31.12.2020	31.12.2019
Financial assets at amortized cost:		
Loan – third party	12 572	12 579
State and government institutions	7 681	13 078
Trade accounts receivable (long-term portion)	18 257	26 155
Guarantee deposits	2 275	2 445
Prepaid expenses and accrued income (long-term portion)	32	139
Total financial assets at amortized cost	**40 817**	**54 395**
Financial assets at fair value through comprehensive income:		
Equity instruments (level 3)	–	517
Total financial assets at fair value through comprehensive income	**–**	**517**
Financial assets at fair value through profit or loss:		
Equity instruments (level 3)	1 188	–
Marketable securities (level 1)	994	–
Total financial assets at fair value through profit or loss	**2 182**	**–**
Other non-current assets:		
Deferred contract cost	–	176
Deferred rent	863	866
Total other non-current assets	**863**	**1 042**
Total	**43 862**	**55 953**

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% (2019: 1.93%). 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	31.12.2020	31.12.2019
Raw materials	3 861	3 212
Work in progress	4 983	5 379
Finished goods	50 353	56 872
	59 197	**65 463**

The cost of inventories recognised as an expense includes kUSD 2 363 (2019: kUSD 2 716) in respect of write-downs, and has been reduced by kUSD 314 (2019: kUSD 22) 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 -5 174 (2019: kUSD 7 397).

20. TRADE ACCOUNTS RECEIVABLE AND CONTRACT ASSETS

In USD'000	31.12.2020	31.12.2019
Trade accounts receivable	209 654	241 431
Less: provision for impairment	-26 202	-29 397
Trade accounts receivable related parties	1 024	2 363
Trade accounts receivable - net	**184 476**	**214 397**
Contract assets	44 779	58 084
Less: provision for impairment	-197	-128
Contract assets - net	**44 582**	**57 956**

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	**2020**	**2019**	**2020**	**2019**
January 1,	**-128**	**-358**	**-29 397**	**-36 780**
Provision for impairment charged to income statement	-75	-19	-4 997	-7 645
Utilization	–	–	5 792	11 904
Reversal	20	245	3 201	3 272
Translation effects	-15	4	-801	-149
December 31,	**-197**	**-128**	**-26 202**	**-29 397**

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 -4 997 (2019: kUSD -7 645). Amounts charged to the provision for impairment account are written-off when there is no expectation to recover additional cash.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

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, 2020 and 2019 were determined as follows:

In USD'000	Gross carrying amount	Expected loss rate	Provision for impairment 31.12.2020	Gross carrying amount	Expected loss rate	Provision for impairment 12.31.2019
Trade accounts receivable not overdue	119 396	0.3%	389	121 184	0.1%	123
Past due:						
- not more than one month	27 273	0.9%	257	37 964	0.4%	141
- more than one month and not more than three months	17 950	2.2%	390	25 807	0.9%	239
- more than three months and not more than six months	7 595	11.2%	847	12 023	6.7%	805
- more than six months and not more than one year	11 082	33.0%	3 656	15 562	45.8%	7 124
- more than one year	26 358	78.4%	20 663	28 890	72.6%	20 966
Total	**209 654**		**26 202**	**241 431**		**29 397**
Contract assets	44 779	0.2%	197	58 084	0.2%	128
Total	**44 779**		**197**	**58 084**		**128**

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	31.12.2020	31.12.2019
Other receivables - third parties	11 560	11 293
Other receivables - related parties	1 423	1 307
Advances to suppliers and employees	2 533	3 151
State and government institutions	38 987	32 646
	54 503	**48 396**

22. OTHER CURRENT ASSETS

In USD'000	31.12.2020	31.12.2019
Prepaid expenses	8 685	10 580
Accrued income	29 035	14 632
Deferred contract cost (short-term portion)	193	217
Other receivables - third parties	637	160
	38 549	**25 589**

23. CASH AND CASH EQUIVALENTS

In USD'000	31.12.2020	31.12.2019
Cash at bank and in hand	145 937	65 929
Short-term deposits	6 647	8 667
	152 584	**74 596**

The effective interest rate on short term deposits was 0.43% (2019: 0.71%). The Group only enters into transactions with highly rated banks.

24. SHARE CAPITAL

ISSUED AND FULLY PAID SHARE CAPITAL

The share capital consists of 50 372 600 (2019: 50 115 192) bearer shares at CHF 8.00 par value each and 46 300 000 (2019: 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 337 295 (2019: kUSD 335 101).

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 (2019: 10 000 000) bearer shares at CHF 8.00 each to satisfy convertible bond exercise right and 441 156 (2019: 698 564) 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:

	31.12.2020		31.12.2019	
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	1 558	37 971	1 558	36 730
Current Assets	30 603	627	43 699	750
Non-current liabilities	–	2 750	–	4 550
Current liabilities	11 628	418	12 402	178
Total Equity	**20 853**	**35 430**	**32 855**	**32 752**
Non-controlling interests percentage	50%	50.1%	50%	50.1%
Theoritical amount of non-controlling interests	10 426	17 751	16 427	16 409
Carrying amount of non-controlling interests	**10 426**	**17 751**	**16 427**	**16 409**
Revenue	23 297	4 409	23 620	4 139
Net result	7 998	2 679	8 734	2 329
Total comprehensive income	7 998	2 679	8 734	2 329
Total comprehensive income allocated to non-controlling interests	3 999	1 339	4 367	1 167
Dividend paid to non controlling interests	-10 000	–	-5 000	–
Net increase /(decrease) in cash and cash equivalents	-8 641	-57	-1 206	334

These companies are treated as subsidiaries because the Group controls them either by financing or bearing an over-proportional responsibility for the main risks.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

26. LONG TERM FINANCIAL DEBT

In USD'000	Note	31.12.2020	31.12.2019
CHF 200 million 1.875% bond 2015/2022	27	225 770	206 279
CHF 150 million 1.5% bond 2016/2024	27	169 137	154 547
Long-term bank loans		44 285	32 203
		439 192	**393 029**

Long term bank loans effective interest rate is 0.77% (2019: 0.75%).

During 2020, several Group entities received loans through programs designed to provide economic support in response to COVID-19. The loans range in maturity from one to five years and generally contain beneficial terms such as governmental guarantees, below market interest rates, and options to extend. The programs also restrict the ability of borrowers to pay dividends and repay intercompany loan balances. As of December 31, 2020, the Group has received kUSD 29 918 of COVID-19 related financing with interest rates ranging from zero to 0.98%. Where the stated interest rates are below market, a portion of the loan proceeds is recognized as a government grant. The grants are 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%.

Bonds are recognized in the consolidated balance sheets as of December 31, as follows:

In USD'000	2020	2019
Initial balance	**360 826**	**354 386**
Amortization of transaction costs less premium	227	211
Currency translation effects	33 854	6 229
Liability component as of December 31	**394 907**	**360 826**
of which:		
- long-term portion (bond 2015/2022)	225 770	206 279
- long-term portion (bond 2016/2024)	169 137	154 547
	394 907	**360 826**

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 sixteen (2019: 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	31.12.2020	31.12.2019
Fair value of plan assets	223 368	191 568
Defined benefit obligation	-272 185	-242 640
Funded status	**-48 817**	**-51 072**
Other comprehensive income	-3 775	-4 277
Prepaid/(accrued) pension cost	-45 042	-46 795
Funded status	**-48 817**	**-51 072**

In accordance with IAS 19, the following amount is recorded as net pension cost in the income statement for the financial years 2020 and 2019:

In USD'000	Note	2020	2019
Service cost		-16 928	-17 247
Employees contributions		5 513	5 202
Amortization of gains/(losses)		6	242
Curtailment gain / (loss)		89	–
Impact of plan amendment		9 974	–
Total recognized in employee benefits expense	**6**	**-1 347**	**-11 803**
Interest cost		-645	-2 472
Interest income		395	1 650
Total recognized in interest expense	**9**	**-250**	**-822**
Net pension (cost)/income		**-1 597**	**-12 624**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

The impact of plan amendment relates to a 2020 Board of Trustees of the Swiss pension plan decision to reduce the conversion rate (factor used to determine monthly benefits at the date of retirement) and to increase the disability and death benefits of the plan effective 1 January 2021.

The main assumptions used for the calculation of the pension cost and the defined benefit obligation for the years 2020 and 2019 are as follows:

	31.12.2020	31.12.2019
Switzerland		
Financial assumptions:		
- Discount rate	0.10%	0.20%
- 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 2015 generational probability risk for disability reduced 50%
- Retirement payment form	75% pension 25% lump sum	75% pension 25% lump sum
Abroad		
- Discount rate	1.29%	1.23%
- Rate of future increase in compensations	2.84%	2.80%
- Turnover *(on average)*	8.4%	9.7%

The weighted average duration of the defined benefit obligation is as follows :

	31.12.2020	31.12.2019
Weighted average duration of the defined benefit obligation in years		
Switzerland	20.0	20.5
Abroad	5.3	11.9

The changes in defined benefit obligation and fair value of plan assets during the years 2020 and 2019 are as follows:

A. Change in defined benefit obligation

In USD'000	2020	2019
Defined benefit obligation as of 1.1.	**-242 640**	**-232 775**
Service cost	-16 928	-17 247
Interest cost	-645	-2 472
Change in demographic assumptions	2 406	20 547
Change in financial assumptions	-4 862	-27 909
Other actuarial gains / (losses)	-7 171	7 731
Benefits payments	10 520	13 194
Exchange rate difference	-22 927	-3 707
Curtailment	89	–
Plan amendment	9 974	–
Defined benefit obligation as of December 31,	**-272 185**	**-242 640**

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	2020	2019
Fair value of plan assets as of 1.1.	**191 568**	**166 457**
Interest income	395	1 650
Return on plan assets excluding interest income	10 459	21 255
Employees' contributions	5 513	5 202
Employer's contribution	7 196	6 700
Benefit payments	-10 520	-13 194
Exchange rate difference	18 757	3 497
Fair value of plan assets as of December 31,	**223 368**	**191 568**

The actual return on plan assets amounts to kUSD 10 854 in 2020 (kUSD 22 905 for the year 2019) and includes an assumed interest income. The estimated employer's contribution to the pension plans for the year 2020 is kUSD 7 304.

The categories of plan assets, all of which are easily convertible to cash, are stated at their fair value at December 31, 2020 and 2019 as follows:

In USD'000	31.12.2020	Proportion in % 31.12.2020	31.12.2019	Proportion in % 31.12.2019
Cash	6 099	2.7%	5 894	3.1%
Swiss bonds	18 083	8.1%	19 034	9.9%
Non-Swiss bonds	58 292	26.1%	50 839	26.5%
Swiss shares	41 649	18.6%	35 932	18.8%
Non-Swiss shares	38 924	17.4%	33 002	17.2%
Real estate	44 427	19.9%	39 101	20.4%
Alternative investments	15 894	7.1%	7 765	4.1%
Total	**223 368**	**100.0%**	**191 568**	**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
2021	11 251	235
2022	10 208	338
2023	9 660	133
2024	9 209	153
2025	8 902	394
2026-2030	42 230	1 160

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

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 2020 year-end defined benefit obligation		Change in 2019 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	-23 648	-396	-21 542	-815
50 basis point decrease in discount rate	27 621	474	25 266	885
50 basis point increase in rate of salary increase	229	n/a	300	n/a
50 basis point decrease in rate of salary increase	-246	n/a	-311	n/a
50 basis point increase in rate of pension increase	9 772	n/a	9 021	n/a
50 basis point decrease in rate of pension increase	-8 978	n/a	-8 263	n/a
50 basis point increase of interest in saving accounts	8 476	n/a	7 707	n/a
50 basis point decrease of interest in saving accounts	-8 015	n/a	-7 283	n/a
50 basis point increase of turnover	-1 880	n/a	-1 915	n/a
50 basis point decrease of turnover	1 759	n/a	1 799	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	31.12.2020	31.12.2019
Long-term loans - third parties	5 698	5 270
Deferred consideration	1 484	1 558
Contingent consideration	1 484	1 558
Other long-term liabilities	121	993
Deferred income	1 191	400
	9 979	**9 780**

The effective interest rate on long-term loans is 2.00% (2019: 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	31.12.2020	31.12.2019
Short-term bank borrowings	47 602	73 214
Other short-term financial liabilities	609	465
	48 212	**73 679**

The average effective interest rate paid in 2020 for short term bank borrowings was 1.56% (2019: 1.29%).

31. TRADE ACCOUNTS PAYABLE

In USD'000	31.12.2020	31.12.2019
Trade accounts payable – third parties	67 699	60 518
Trade accounts payable – related parties	33	55
	67 732	**60 573**

32. CONTRACT LIABILITIES

In USD'000	31.12.2020	31.12.2019
Amounts due to customers for contract work	5 111	3 962
Advances from clients	22 858	19 129
Deferred income	41 905	22 355
	69 873	**45 446**

33. OTHER CURRENT LIABILITIES

In USD'000	31.12.2020	31.12.2019
Accrued expenses	83 369	73 624
Contingent consideration (level 3)	–	682
Payable to pension fund	1 757	1 921
Other payables	24 395	16 719
	109 521	**92 946**

Deferred and contingent consideration balances include the short-term portion of deferred fix and earn-out payments in connection with business acquisitions.

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. There were no long-term derivative instruments at December 31, 2020 and 2019.

In USD'000	Cost of hedging reserve	Intrinsic value of options	Total hedge reserves
Balance at January 1, 2019	-42	42	–
Reclassified from OCI to profit or loss	42	-42	–
Balance at December 31, 2019	**–**	**–**	**–**
Balance at December 31, 2020	**–**	**–**	**–**

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 2020 (2019: mUSD 54) with maturities between January and December and average strike rate of USD/CHF 0.985 in 2020 (2019: USD/CHF 0.98). 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 2020 and 2019 relating to foreign currency options.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

35. PROVISIONS FOR OTHER LIABILITIES AND CHARGES

In USD'000	Restructuring provisions	Provision for warranty	Litigations and others	Total 2020	Total 2019
As of January 1	**4 105**	**2 117**	**81**	**6 302**	**11 465**
Additional provisions	–	94	71	166	2 079
Unused amounts reversed	-791	-121	–	-912	-568
Used during the year	-2 019	-16	–	-2 036	-6 504
Exchange differences	166	147	9	322	-170
As of December 31	**1 460**	**2 220**	**162**	**3 842**	**6 302**
Thereof:					
- Short-term	1 460	2 220	162	3 842	6 302
- Long-term	–	–	–	–	–
	1 460	**2 220**	**162**	**3 842**	**6 302**

Restructuring provisions

Restructuring provisions in 2020 and 2019 primarily relate to headcount reduction measures impacting the Group's Digital TV operations. In addition, the 2019 provision included amounts related to the non-achievement of sales commitments on an abandoned initiative.

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. ASSETS HELD FOR SALE

At December 31, 2020 and 2019, assets classified as held for sale represents a building retained upon the disposal of the SmarDTV operations in August 2018. The Group is actively seeking a buyer for the remaining building and anticipates a sale to be completed within the next 12 months.

In USD'000	31.12.2020	31.12.2019
Assets classified as held for sale:		
- Tangible fixed assets	12 777	11 497

37. RESEARCH AND DEVELOPMENT

The following amounts were recognized as expense and charged to the income statement:

In USD'000	2020	2019
Research and development	128 411	145 915

38. DIVIDEND

On April 22, 2020, the Group paid a distribution of CHF 0.10 per bearer share and CHF 0.01 per registered share. The distribution amounted to kUSD 5 692. Since year end, the Board of Directors have proposed a distribution of kUSD 5 860, 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, 2020 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 2020	Shares 2019
Shares underwritten by employees	42 810	20 100
Bonus shares from ESPP	8 562	4 020
Total employee share program	**51 372**	**24 120**
Amount paid by employee (In USD'000)	102	85
Booked corporate charges (excluding social charges) (In USD'000)	45	38
	146	**123**

SHARES ISSUED TO EMPLOYEES

In 2020, 206 036 (2019: 180 199) bearer shares of Kudelski SA were given to employees for no consideration as part of their compensation, of which 132 836 (2019: 89 226) include a seven-year blocking period, 73 200 (2019: 84 723) include a three-year blocking period and 0 (2019: 6 250) with no restriction to sale. The fair value recognized for this equity based compensation is kUSD 915 (2019: kUSD 875).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

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 2020	Sale of goods and services 2019	Purchase of goods and services 2020	Purchase of goods and services 2019	Amounts owed to related parties 31.12.2020	Amounts owed to related parties 31.12.2019	Amounts owed by related parties 31.12.2020	Amounts owed by related parties 31.12.2019
APT-Skidata Ltd	4 072	5 595	–	–	33	55	429	1 792
SKIDATA Parking System Ltd	1 304	1 600	–	–	–	–	81	90
SKIDATA India Private Limited	449	246	–	–	–	–	94	97
iWedia SA	–	–	–	120	–	123	–	–
Total associated companies	**5 825**	**7 441**	**–**	**120**	**33**	**177**	**604**	**1 979**
Audio Technology Switzerland SA	–	–	–	–	–	–	1 830	1 673
Total other related	**–**	**–**	**–**	**–**	**–**	**–**	**1 830**	**1 673**

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	2020	2019
Salaries and other short-term employees benefits	8 693	7 131
Post-employments benefits	49	50
Share-based payments	501	379
	9 242	**7 560**

41. SHAREHOLDINGS AND LOANS

PRINCIPAL SHAREHOLDERS

	Voting rights		Shareholdings	
	31.12.2020	31.12.2019	31.12.2020	31.12.2019
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, 2020 and 2019, the members of the Board of Directors and members of Group management had the following interest in the company (without including shares from 2020 and 2019 variable compensation - issued in 2020 and 2021 respectively):

	31.12.2020	31.12.2019
	Bearer shares	Bearer shares
Board of Directors		
Kudelski André, chairman (as member of the family pool)	10 662 923	10 509 423
Smadja Claude, vice chairman	1 300	1 300
Dassault Laurent, member	1 040 720	705 790
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	**11 709 193**	**11 220 763**
Management		
Kudelski André, CEO	see above	see above
Saladini Mauro, CFO	156 851	132 325
Solbakken Morten, COO	47 265	26 216
Goldberg Nancy, CMO	14 846	–
Total Management (excluding CEO)	**218 962**	**158 541**

The Kudelski family pool also owns 46 300 000 registered shares of Kudelski SA as of December 31, 2020 and 2019.

No loans were granted in 2020 and 2019 to the members of the Board of Directors and Group management.

Michael Hengartner became a member of the Board of Directors on April 15, 2020.

At December 31, 2020, Mauro Saladini owned kCHF 60 nominal value of the bond maturing in 2024.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

42. CATEGORIES OF FINANCIAL INSTRUMENTS

The financial assets and liabilities are classified as follow as of December 31, 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 fair value through OCI	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)	18	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**

And for 2019:

Assets as per balance sheet date December 31, 2019 (in USD'000)	Note	Financial assets at fair value through profit or loss	Financial assets at fair value through OCI	Financial Assets at amortized costs	Total 31.12.2019
Financial assets and non current assets:					
- equity instruments with no quoted market price (level 3)	18	–	517	–	517
- long-term loans	18	–	–	12 579	12 579
- state and government institutions	18	–	–	13 078	13 078
- trade accounts receivable - long-term portion	18	–	–	26 155	26 155
- guarantee deposits	18	–	–	2 445	2 445
- prepaid expenses and accrued income (long-term)	18	–	–	138	138
Trade accounts receivable	20	–	–	214 397	214 397
Other current assets:					
- state and government institutions	21	–	–	32 646	32 646
- other receivable (third and related parties)	21	–	–	12 599	12 599
Cash and cash equivalents	23	–	–	74 596	74 596
		–	517	388 633	389 150

Liabilities as per balance sheet date December 31, 2019 (in USD'000)	Note	Financial liabilities at fair value through profit or loss	Financial Liabilities at amortized costs	Total 31.12.2019
Long-term financial debt	26	–	393 029	393 029
Long-term lease obligations	15	–	28 491	28 491
Other long-term liabilities:				
- deferred consideration	29	–	1 558	1 558
- contingent consideration (level 3)	29	1 558	–	1 558
- loans and others	29	–	6 263	6 263
Short-term financial debt	30	–	73 678	73 678
Short-term lease obligations	15	–	15 548	15 548
Trade accounts payable	31	–	60 573	60 573
Other current liabilities:				
- contingent consideration (level 3)	33	682	–	682
- payable to pension fund	33	–	1 921	1 921
- other payables	33	–	16 719	16 719
- current income tax		–	9 085	9 085
		2 240	606 865	609 105

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)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

The table below illustrates the three hierarchical levels for valuing financial instruments carried at fair value as of December 31, 2020 and 2019:

In USD'000		Note	31.12.2020	31.12.2019
Financial assets at fair value through comprehensive income:				
- marketable securities	Level 1	18	994	–
- equity instuments with no quoted market price	Level 3	18	1 188	517
Total financial assets			**2 182**	**517**
Financial liabilities:				
- contingent consideration (short-term portion)	Level 3	33	–	682
- contingent consideration (long-term portion)	Level 3	29	1 484	1 558
Total financial liabilities			**1 484**	**2 240**

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% (2019: between 6.6% and 10.2%).

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, 2019	508	-2 494
Settlements	–	279
Remeasurement (recognized in other operating income)	–	-170
Discount effect (recognized in interest expense)	–	6
Currency translation adjustment	9	139
Balance at December 31, 2019	**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**

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 2020	Fair value 2020	Carrying amount 2019	Fair value 2019
Financial liabilities				
- CHF 200 million bond	225 770	183 049	206 279	189 134
- CHF 150 million bond	169 137	106 020	154 547	123 339

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	Adjustment	Adjustment	Total book value	Total book value
	2020	2019	2020	2019	2020	2019	2020	2019	2020	2019
Bonds	6 819	6 235	407 458	378 755	–	–	-19 370	-24 164	394 907	360 826
Long-term bank loans	–	–	46 467	32 729	–	–	-2 182	-526	44 285	32 203
Short-term financial debt	48 160	73 679	–	–	–	–	-557	–	47 602	73 679
Trade accounts payable	67 732	60 573	–	–	–	–	–	–	67 732	60 573
Other payables	24 395	16 719	–	–	–	–	–	–	24 395	16 719
Total	**147 106**	**157 205**	**453 925**	**411 484**	**–**	**–**	**-22 109**	**-24 689**	**578 922**	**544 000**

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% (2019: 10%) increase and decrease in the CHF and a 10% (2019: 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.

In USD'000	CHF 2020	CHF 2019	EUR 2020	EUR 2019
Post-tax net income				
- Increase	-7 699	-10 502	-1 205	-1 062
- Decrease	7 699	10 502	1 205	1 062
Comprehensive income (post-tax effect)				
- Increase	-16 422	-23 502	3 368	–
- Decrease	16 422	23 502	-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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

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 purposes:
- USD: increase of 100 basis points and decrease of 100 basis points (2019: 100 basis points increase or 100 decrease)
- EUR: increase of 100 basis points and decrease of 100 basis points (2019: 100 basis points increase or 100 decrease)
- CHF: increase of 100 basis points and decrease of 100 basis points (2019: 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, 2020 would increase by kUSD 464 and decrease by kUSD 82, respectively. (2019: increase by kUSD 176 and decrease by kUSD 328). This is mainly due to the interest rate exposure on cash balances.
- other comprehensive income would not be impacted in 2020 and 2019.

Equity prices
The Group is not materially exposed to any equity price fluctuation.

46. COLLATERAL RECEIVED AND GIVEN

In USD'000	31.12.2020	31.12.2019
Guarantees in favor of third parties	21 636	21 402

47. RISK CONCENTRATION
At December 31, 2020 and 2019, 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, 2020 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, 2020 was 39.6% (2019: 8.7%).

2020 operating cash flow was positive USD 132.6 million (2019: USD 34.2 million) mainly reflecting a USD 92.4 million of working capital. Working capital improvements took place throughout all Group segments, including Public Access.

50. NET DEBT RECONCILIATION

In USD'000	31.12.2020	31.12.2019
Cash and cash equivalents	152 584	74 596
Long-term financial debt	-439 192	-393 029
Long-term lease obligations	-29 599	-28 491
Short-term financial debt	-48 212	-73 679
Short-term lease obligations	-13 720	-15 548
Net debt	**-378 137**	**-436 151**

In USD'000	Note:	Cash and cash equivalents	Long-term debt	Short-term debt	Lease obligations	Total
Net debt at January 1, 2019		**85 979**	**-398 161**	**-64 122**	**–**	**-376 304**
Cash flows		-11 130	–	–		-11 130
Change in accounting policy		–	–	–	-56 132	-56 132
Lease addition		–	–	–	-6 459	-6 459
Reimbursment of bank overdrafts, long-term loans		–	10 630	18 584	18 558	47 772
Increase in bank overdrafts, long-term loans		–	–	-28 809	–	-28 809
Foreign exchange adjustments		-253	-5 287	668	-6	-4 878
Amortization of transaction cost less premium	27	–	-211	–	–	-211
Net debt at December 31, 2019		**74 596**	**-393 029**	**-73 679**	**-44 039**	**-436 151**
Cash flows		71 415	–	–	–	71 415
Change in accounting policy		–	–	–	–	–
Lease addition		–	–	–	-16 937	-16 937
Reimbursment of bank overdrafts, long-term loans and lease obligations		–	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**

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	
	2020	**2019**	**2020**	**2019**
1 CHF	1.1299	1.0331	1.0654	1.0063
1 EUR	1.2226	1.1229	1.1404	1.1195
100 CNY	15.3107	14.3595	14.4938	14.4795
100 NOK	11.6452	11.4029	10.6496	11.3713
1 GBP	1.3661	1.3254	1.2830	1.2767
100 BRL	19.2090	24.8967	19.6069	25.3799
100 INR	1.3672	1.4050	1.3494	1.4205
1 SGD	0.7559	0.7438	0.7250	0.7331
100 ZAR	6.7797	7.1281	6.1109	6.9236
100 RUB	1.3480	1.6105	1.3917	1.5462
1 AUD	0.7695	0.7025	0.6899	0.6954

53. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Board of Directors and authorised for issuance on February 24, 2021.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2020

54. PRINCIPAL OPERATING COMPANIES

Company	Place of incorporation	Activity	Digital TV	Cyber-security	Internet of Things	Public Access	Corporate	Percentage held 2020	Percentage held 2019
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 2020

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 2020, the consolidated balance sheets as at 31 December 2020, 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 159) give a true and fair view of the consolidated financial position of the Group as at 31 December 2020 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 3'600'000

We conducted full scope audit work at 6 reporting components in four countries. In order to increase our coverage, we also performed certain specified procedures at one entity. Our audit scope addressed 69% of the Group's revenue.

As key audit matter, Goodwill impairment Cybersecurity and Internet of Things has been identified.

PricewaterhouseCoopers SA, avenue C.-F. Ramuz 45, case postale, CH-1001 Lausanne, Switzerland
Téléphone: +41 58 792 81 00, Téléfax: +41 58 792 81 10, www.pwc.ch

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 3'600'000
How we determined it	0.5% of 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 360'000 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 65 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 357.3 million at 31 December 2020, comprising USD 66.1 million related to the Cybersecurity segment and USD 36.5 million related to the Internet of Things segment. We focused on these areas in view of the significance of	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 obtained the Group's impairment analysis for

the amounts involved, the business segments' operating performance during 2020 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.	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, 24 February 2021

BALANCE SHEETS AT DECEMBER 31, 2020 AND 2019

ASSETS

In CHF'000	Notes	31.12.2020	31.12.2019
Current assets			
Cash and cash equivalents		12 618	2 443
Accounts receivable from Group companies		70 323	81 940
Other current receivables and prepaid expenses	3.1	649	816
Total current assets		**83 590**	**85 199**
Fixed assets			
Loans to Group companies		460 493	594 521
Loan to third party		949	1 038
Investments	3.2	459 423	364 256
Total fixed assets		**920 865**	**959 815**
Total assets		**1 004 455**	**1 045 014**

SHAREHOLDERS' EQUITY AND LIABILITIES

In CHF'000	Notes	31.12.2020	31.12.2019
Short-term liabilities			
Short-term interest-bearing liabilities :			
- Bank, short-term borrowings		10 000	21 000
Other short-term liabilities :			
- due to third parties		280	205
- due to Group companies		27 551	24 925
Accrued expenses		1 945	1 922
Total short-term liabilities		**39 776**	**48 052**
Long-term liabilities			
Long-term interest-bearing liabilities :			
- Bonds	3.3	350 000	350 000
Total long-term liabilities		**350 000**	**350 000**
Total liabilities		**389 776**	**398 052**
Shareholders' equity			
Share capital		440 021	437 961
Legal reserves:			
- from retained earnings		110 000	110 000
- from capital contribution		71 467	74 216
Retained earnings		22 035	88 198
Net (loss) / income		-28 845	-63 413
Total shareholders' equity	**3.4**	**614 679**	**646 962**
Total liabilities and shareholders' equity		**1 004 455**	**1 045 014**

INCOME STATEMENTS AND PROPOSAL FOR APPROPRIATION OF AVAILABLE EARNINGS FOR THE YEAR 2020

INCOME STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2020 AND 2019

In CHF'000	Notes	2020	2019
Other non operating income		105	–
Financial income	4.1	20 819	23 596
Gain on sale of investments		296	2 418
Administrative and other expenses		-2 662	-3 128
Financial expenses and exchange result	4.2	-33 322	-14 800
Impairment of financial fixed assets	4.3	-13 638	-70 454
Income/(loss) before tax		**-28 402**	**-62 368**
Direct taxes (other than income tax)		-443	-1 045
Net income/(loss)		**-28 845**	**-63 413**

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	74 216	24 784
Dividend	-2 749	-2 749
Net result	–	-28 845
Total available earnings	**71 467**	**-6 810**
The Board proposes the partial dissolution of CHF 20'000'000 of the legal reserve from retained earnings and a distribution as follows:		
Partial dissolution of the legal reserve from retained earnings	–	20 000
Ordinary distribution:		
- CHF 0.10 on 50'372'600* bearer shares (of which CHF 0.05 out of capital contribution reserve and CHF 0.05 out of retained earnings)	-2 519	-2 519
- 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	**68 717**	**10 440**

*This figure represents the number of bearer shares which are dividend bearing as of December 31, 2020 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 2020

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 2020

3. NOTES TO THE BALANCE SHEETS

3.1 OTHER CURRENT RECEIVABLES AND PREPAID EXPENSES

In CHF'000	31.12.2020	31.12.2019
Prepaid expenses	578	730
Withholding tax	69	69
Other accounts receivable	2	17
	649	**816**

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 2020	2019
Nagravision SA	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	–
SKIDATA GmbH	AT - Salzburg	Public access	kEUR	3 634	100	100
Nagra Plus	CH – Cheseaux	Analog Pay-TV solutions	kCHF	100	50	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	100	100	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	100	100	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	553	100	100
Nagra Media Japan K.K.	JP - Tokyo	Sales and support	kJPY	0	M	100
Nagra Media (Taiwan) Co., Ltd	TW - Taipei	Sales and support	kNTD	500	100	100
Kudelski Norway AS	NO - Oslo	Holding	kNOK	0	M	100
Nagravision AS	NO - Oslo	Solutions for Digital TV	kNOK	1 111	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	16
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
OpenTV Australia Holding Pty Ltd	AU - New South Wales	Holding	kAUD	0	L	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 2020	2019
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

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.

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.

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 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, 2018	**436 327**	**110 000**	**79 689**	**88 198**	**714 214**
Dividend	–	–	-5 473	–	-5 473
Share capital increase	1 634	–	–	–	1 634
Net Income	–	–	–	-63 413	-63 413
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**

NOTES TO THE FINANCIAL STATEMENTS 2020

SHARE CAPITAL

In CHF'000	31.12.2020	31.12.2019
50'372'600 / 50'115'192 bearer shares, at CHF 8 each	402 981	400 922
46'300'000 registered shares, at CHF 0.80 each	37 040	37 040
	440 021	**437 962**

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	2020	2019
Conditional share capital as of January 1	85 588	83 223
Increase of conditional share capital	–	4 000
Employee share purchase plan	-411	-193
Shares allotted to employees	-1 648	-1 442
Conditional share capital at December 31	**83 529**	**85 588**
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:		
441'156 / 698'564 bearer shares, at CHF 8 each	3 529	5 588
	83 529	**85 588**

AUTHORIZED SHARE CAPITAL (ARTICLE 7 OF ARTICLES OF INCORPORATION)

In CHF'000	31.12.2020	31.12.2019
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		Shareholdings	
	31.12.2020	31.12.2019	31.12.2020	31.12.2019
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	2020	2019
Dividends received from Group subsidiaries	16 573	5 425
Interest on loans to Group subsidiaries	4 246	18 042
Interest income third parties	–	129
	20 819	**23 596**

4.2 FINANCIAL EXPENSES AND EXCHANGE RESULTS

In CHF'000	2020	2019
Net currency exchange result	-26 528	-7 849
Interest on loans from Group subsidiaries	-230	-460
Interest expenses and bank charges	-6 564	-6 491
	-33 322	**-14 800**

4.3 IMPAIRMENT OF FINANCIAL FIXED ASSETS

In CHF'000	2020	2019
Change in provision on Group investments and loans	-9 642	-70 454
Value adjustment on investments	-3 996	–
	-13 638	**-70 454**

The change in provision on Group investments relates to capital contributions (stabilization measures) of kCHF 12 230 (2019: kCHF 59 631) and a reduction on an intercompany loan provision of kCHF 2 588. In 2019, an impairment of kCHF 10 823 has been recognized for an entity that has transferred all its activities to another Group and is no longer active.
The value adjustment on investments concern impairments recognized for two entities that are no longer active.

NOTES TO THE FINANCIAL STATEMENTS 2020

5. COMMITMENTS AND CONTINGENCIES

In CHF'000	31.12.2020	31.12.2019
Guarantee commitments		
Commitment in favor of third parties and Group companies	1 015	786
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 2020 and 2019 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 2020

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 sheets as at 31 December 2020, income statements and notes for the year then ended, including a summary of significant accounting policies.

In our opinion, the financial statements (pages 165 to 173) as at 31 December 2020 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 a key audit matter, the valuation of investments in subsidiaries and loans to Group companies has been identified.

PricewaterhouseCoopers SA, avenue C.-F. Ramuz 45, case postale, CH-1001 Lausanne, Switzerland
Téléphone: +41 58 792 81 00, Téléfax: +41 58 792 81 10, www.pwc.ch

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 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
How we determined it	1% of 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 459 million and CHF 460 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 634 million Public Access (PA): CHF 176 million Cybersecurity (CS): CHF 60 million Internet of Things (IoT): CHF 49 million We focused on these areas in view of the significance of the amounts involved, the business segments' operating	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

performance during 2020 and the judgement used by management about future results. 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	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. - 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 available earnings and 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, 24 February 2021

INTERNET LINKS

GROUP WEBSITE
www.nagra.com

INVESTOR RELATIONS SECTION
www.nagra.com/investors/key-figures

IMPORTANT DATES
www.nagra.com/investors/calendar

FINANCIAL DOCUMENTATION
www.nagra.com/investors/publications

PRESS RELEASES
www.nagra.com/media/press-releases

E-MAIL ADDRESSES

GENERAL INFORMATION
info@nagra.com

INVESTOR RELATIONS
ir@nagra.com

MEDIA RELATIONS
communication@nagra.com

IMPRESSUM

EDITING AND GRAPHIC DESIGN
Corporate Communication, Kudelski Group

PHOTOGRAPHY
Internal image banks, © Kudelski SA
External image banks

PRINTING
Genoud Arts Graphiques SA, Le Mont-sur-Lausanne

DISCLAIMER

This report contains forward-looking statements, including, but not limited to, statements that are predictions of or indicate future events, trends, plans or objectives. These statements are subject to known and unknown risks and uncertainties and could be affected by other factors that could cause actual results, plans and objectives to differ materially from those expressed or implied in the forward-looking statements. Potential risks and uncertainties include such factors as general economic conditions, performance of the financial markets, competitive factors and changes in laws and regulations.

FSC www.fsc.org MIX Paper from responsible sources FSC® C003464

This report is published in English and French, except for the Financial statements which are only published in English. In case of inconsistency between the French and the English version of the Corporate Governance report and the Compensation report, the French version prevails.

KUDELSKI SA

ROUTE DE GENÈVE 22-24 P.O. BOX 134 1033 CHESEAUX-SUR-LAUSANNE SWITZERLAND
T +41 21 732 01 01 F +41 21 732 01 00 INFO@NAGRA.COM WWW.NAGRA.COM