KUDELSKI GROUP FINANCIAL STATEMENTS 2019

KUDELSKI GROUP

CONTENTS

KUDELSKI GROUP CONSOLIDATED FINANCIAL STATEMENTS

KUDELSKI SA FINANCIAL STATEMENTS

CONSOLIDATED INCOME STATEMENTS

(FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018)

In USD'000	Notes	2019	2018
Revenues	5	810 201	908 205
Other operating income	6	17 076	11 482
Total revenues and other operating income		**827 277**	**919 687**
Cost of material, licenses and services		-255 230	-270 791
Employee benefits expense	7	-407 617	-448 087
Other operating expenses	8	-123 850	-165 053
Operating income before depreciation, amortization and impairment		**40 580**	**35 756**
Depreciation, amortization and impairment	9	-55 850	-43 059
Operating income		**-15 270**	**-7 303**
Interest expense	10	-10 182	-10 440
Other finance income/(expense), net	11	-1 705	-310
Share of result of associates	16	1 901	1 495
Income before tax		**-25 256**	**-16 558**
Income tax expense	12	-13 312	-7 741
Net income for the period from continuing operations		**-38 568**	**-24 299**
Net result from discontinued operations	36	–	4 278
Net income for the period		**-38 568**	**-20 020**
Attributable to:			
- Equity holders of the company		*-44 497*	*-28 453*
- Non-controlling interests		*5 929*	*8 433*

Earnings per share (in USD)

Attributable to shareholders of Kudelski SA for bearer shares : basic and diluted (in USD)	13	-0.8130	-0.5218
- Continuing operations		*-0.8130*	*-0.5826*
- Discontinued operations		*-*	*0.0608*
Attributable to shareholders of Kudelski SA for registered shares : basic and diluted (in USD)	13	-0.0813	-0.0522
- Continuing operations		*-0.0813*	*-0.0583*
- Discontinued operations		*-*	*0.0061*

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

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018)

In USD'000	Notes	2019	2018
Net income		**-38 568**	**-20 020**
Other comprehensive income to be eventually reclassified into the consolidated income statement in subsequent periods:			
Currency translation differences		-9 307	-14 371
Cash flow hedges, net of income tax		–	-244
		-9 307	**-14 615**
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		–	-153
Remeasurements on post employment benefit obligations, net of income tax		18 461	-9 095
		18 461	**-9 248**
Total other comprehensive income, net of tax		**9 154**	**-23 863**
Total comprehensive income		**-29 414**	**-43 883**
Attributable to:			
Shareholders of Kudelski SA		-35 300	-52 018
- Continuing operations		*-35 300*	*-54 883*
- Discontinued operations		*-*	*2 865*
Non-controlling interests		5 886	8 135

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

CONSOLIDATED BALANCE SHEETS
(AT DECEMBER 31, 2019 AND 2018)

In USD'000	Notes	31.12.2019	31.12.2018
ASSETS			
Non-current assets			
Tangible fixed assets	14	126 783	128 176
Intangible assets	15	407 410	431 723
Right-of-use assets	4	41 517	–
Investments in associates	16	6 309	6 191
Deferred income tax assets	17	57 785	61 612
Financial assets at fair value through comprehensive income	18	517	508
Financial assets at amortized cost	18	54 395	67 251
Other non-current assets	18	1 042	1 227
Total non-current assets		**695 758**	**696 687**
Current assets			
Inventories	19	65 463	59 868
Trade accounts receivable	20	214 397	257 092
Contract assets	20	57 956	59 987
Other financial assets at amortized cost	21	48 396	41 021
Other current assets	22	25 589	22 915
Derivative financial instruments	34	–	64
Cash and cash equivalents	23	74 596	85 979
Total current assets		**486 397**	**526 926**
Assets classified as held for sale	**36**	**11 497**	**14 401**
Total assets		**1 193 651**	**1 238 014**
EQUITY AND LIABILITIES			
Equity			
Share capital	24	335 101	333 456
Reserves		31 280	73 164
Equity attributable to equity holders of the parent		**366 381**	**406 620**
Non-controlling interests	25	37 037	36 541
Total equity		**403 418**	**443 162**
Non-current liabilities			
Long-term financial debt	26	393 029	398 161
Long-term lease obligations	4	28 491	–
Deferred income tax liabilities	17	4 282	6 878
Employee benefits liabilities	28	51 072	66 319
Provisions for other liabilities and charges	35	–	97
Other long-term liabilities	29	9 780	12 946
Total non-current liabilities		**486 654**	**484 400**
Current liabilities			
Short-term financial debt	30	73 679	64 122
Short-term lease obligations	4	15 548	–
Trade accounts payable	31	60 572	79 608
Contract liabilities	32	45 446	50 570
Other current liabilities	33	92 946	95 746
Current income taxes		9 085	8 848
Derivative financial instruments	34	–	190
Provisions for other liabilities and charges	35	6 302	11 368
Total current liabilities		**303 579**	**310 452**
Total liabilities		**790 233**	**794 852**
Total equity and liabilities		**1 193 651**	**1 238 014**

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

CONSOLIDATED CASH FLOW STATEMENTS

(FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018)

In USD'000	Notes	2019	2018
Net income for the year		**-38 568**	**-20 020**
Adjustments for net income non-cash items:			
- Current and deferred income tax		13 312	8 108
- Interests, allocation of transaction costs and foreign exchange differences		8 375	12 725
- Depreciation, amortization and impairment	9	55 850	43 059
- Share of result of associates	16	-1 901	-1 495
- Non-cash employee benefits (income) / expense		6 015	4 954
- Deferred cost allocated to income statement		360	289
- Additional provisions net of unused amounts reversed		1 512	8 762
- Non-cash government grant income		-8 109	-4 305
- Other non-cash (income) / expenses		-6 675	16 914
Adjustments for items for which cash effects are investing or financing cash flows:			
- Net result on sales of subsidiaries and operations		–	-12 431
- Other non-operating cash items		958	127
Adjustments for change in working capital:			
- Change in inventories		-5 104	212
- Change in trade accounts receivable		58 806	723
- Change in trade accounts payable		-26 448	-16 171
- Change in accrued expenses		-1 117	-23 159
- Change in deferred costs and other net current working capital headings		-17 243	-17 113
Government grant from previous periods received		2 985	6 664
Dividends received from associated companies	16	1 871	937
Interest paid		-8 898	-8 200
Interest received		1 011	1 328
Income tax paid		-2 834	-6 628
Cash flow from operating activities		**34 157**	**-4 722**
Purchases of intangible fixed assets		-3 338	-9 268
Purchases of tangible fixed assets		-13 651	-15 659
Proceeds from sales of tangible and intangible fixed assets		–	641
Proceeds from sale of investment property		2 298	–
Investment in financial assets and loans granted		-434	-2 729
Divestment of financial assets and loan reimbursement		472	3 046
Acquisition of subsidiaries, cash outflow (net of cash acquired):			
- Cash consideration arising from current year business combinations		–	-3 893
- Cash acquired from business combinations		–	3 332
- Payment arising from current years business combinations		–	-1 956
- Payment arising from prior years business combinations		-279	-11 880
Disposal of subsidiaries and operations		–	20 556
Cash flow from investing activities		**-14 931**	**-17 811**
Reimbursement of bank overdrafts, long-term loans and other non-current liabilities		-31 463	-23 225
Increase in bank overdrafts, long-term loans and other non-current liabilities		28 886	68 444
Payments of lease liabilities		-16 966	–
Proceeds from employee share purchase program	39	85	138
Acquisition of non-controlling interests			
Dividends paid to non-controlling interests		-5 390	-382
Dividends paid to shareholders	38	-5 508	-5 568
Cash flow from financing activities		**-30 356**	**39 407**
Effect of foreign exchange rate changes on cash and cash equivalents		-253	-2 807
Net movement in cash and cash equivalents		**-11 383**	**14 068**
Cash and cash equivalents at the beginning of the year	23	85 979	71 911
Cash and cash equivalents at the end of the year	23	74 596	85 979
Net movement in cash and cash equivalents		**-11 383**	**14 068**

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

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
(FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018)

In USD'000	Notes	Share capital	Share premium	Retained earnings	Fair value and other reserves	Currency translation adjustment	Non-controlling interests	Total equity
December 31, 2017 (published)		**332 222**	**85 345**	**35 549**	**-2 627**	**26 187**	**21 653**	**498 330**
Change in accounting policy		–	–	-9 172	26	-496	803	-8 840
January 1, 2018 (restated)		**332 222**	**85 345**	**26 376**	**-2 601**	**25 691**	**22 456**	**489 489**
Net income		–	–	-28 453	–	–	8 433	-20 020
Other comprehensive income		–	–	-9 120	-397	-14 048	-298	-23 863
Total comprehensive income		**–**	**–**	**-37 573**	**-397**	**-14 048**	**8 135**	**-43 883**
Employee share purchase program	39	218	-19	–	–	–	–	199
Shares issued to employees	39	1 016	133	–	–	–	–	1 150
Dividends paid to shareholders		–	-5 568	–	–	–		-5 568
Dividends paid to non-controlling interests		–	–	–	–	–	-382	-382
Transactions with non-controlling interests		–	–	-4 176	–	–	4 176	–
Sale of non-controlling interest		–	–	–	–	–	-2	-2
Equity contribution from non-controlling interest		–	–	–	–	–	2 158	2 158
December 31, 2018		**333 456**	**79 892**	**-15 373**	**-2 998**	**11 643**	**36 541**	**443 162**
December 31, 2018 (published)		**333 456**	**79 892**	**-15 373**	**-2 998**	**11 643**	**36 541**	**443 162**
Change in accounting policy	4	–	–	-429	–	–	–	-429
January 1, 2019 (restated)		**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	38	–	-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**

Fair value and other reserves as of December 31, 2019 include kUSD -2 998 (2018: 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 2019

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, except for the changes in accounting policies described in note 4. 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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

(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 software 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) Payments to customers
Payments made by the Group to customers to enter into or to renew existing customer relationships are generally treated as a reduction to the transaction price of the contract and are recognized to the income statement at the later of when the Group recognizes the revenue for the transfer of the related goods and services or when the Group pays the consideration.

(g) 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 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 con-

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

solidated 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 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 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 OCI, or through profit or loss), and financial

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

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.

(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 and 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.

(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 re-

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

flects 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 comprehensive 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.

When the Group is committed to a sale plan involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Group will retain a non-controlling interest in its former subsidiary after sale.

When the Group is committed to a sale plan involving disposal of an investment, or a portion of an investment, in an associate, the investment or portion of the investment that will be disposed of is classified as held for sale when the criteria described above are met, and the Group discontinues the use of the equity method in relation to the portion that is classified as held for sale. Any retained portion of an investment in an associate that has not been classified as held for sale continues to be accounted for using the equity method. The Group discontinues the use of the equity method at the time of disposal when the disposal results in the Group losing significant influence over the associate.

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, 2018, except for the adoption of new standards and interpretations as of January 1, 2019 described below.

The Group applies, for the first time, IFRS 16 Leases. The impact of the adoption of the new standard is disclosed in note 4.

The Group has also applied the following amendments and interpretations effective from January 1, 2019:
• Prepayment Features with Negative Compensation - Amendments to IFRS 9
• Long-term Interests in Associates and Joint Ventures - Amendments to IAS 28
• Annual Improvements to IFRS Standards 2015-2017 Cycle
• Plan Amendment, Curtailment or Settlement - Amendments to IAS 19
• Interpretation 23 Uncertainty over Income Tax Treatments

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

Standard and Interpretations in issue not yet adopted

Certain new standards, amendments and interpretations to existing standards have been published that are mandatory for the Group's accounting periods beginning after January 1, 2020 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 (IFRS).

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 15). Actual cash flows and values could vary significantly from the forecasted cash flows and related values derived using discounting techniques.

Complete security solutions generating recurring service revenues

As defined in note 1 D, the Group provides complete security solutions which generate recurring service revenues. Depending on the contract terms with each client, the Group may replace the assets made available or transferred to the client for security or economic reasons. Early replacement due to technical obsolescence would result in an impairment of the assets made available to the client or of the deferred costs, which would impact the profitability of the Group.

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 dis-

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

count rate, salary and expected pension increases, interest rate credited in savings accounts, and returns on plan assets. Demographic assumptions include employee turnover, retirement payment forms (capital vs. annuity), mortality tables and disability assumptions. Demographic assumptions are based on past experience. In addition, the Group's actuarial consultants use statistical information such as withdrawal and mortality rates for their estimates.

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

3. FINANCIAL RISK MANAGEMENT

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

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

Market risk

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

The Group does not enter into any financial transactions containing a risk that cannot be quantified at the time the transaction is concluded (it does not sell assets short). The Group only sells existing assets or hedges transactions and future transactions that are likely to happen. Future transaction hedges are contracted according to treasury policy 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 2019

4. CHANGE IN ACCOUNTING POLICIES

This note explains the impact of the adoption of IFRS 16 Leases on the Group's financial statements. The Group has adopted IFRS 16 Leases retrospectively from January 1, 2019, but has not restated comparatives for the 2018 financial year as permitted under the specific transitional provisions in IFRS 16. The reclassifications and adjustments arising from the new leasing rules are therefore recognized in the opening balance sheet on January 1, 2019.

Upon adoption of IFRS 16, the Group recognized lease liabilities in relation to leases which had previously been classified as 'operating leases' under the principles of IAS 17 Leases. These liabilities were measured at the present value of the remaining lease payments, discounted using the Group's incremental borrowing rate as of January 1, 2019. The weighted average incremental borrowing rate applied to the lease liabilities on January 1, 2019 was 3.40%. The reconciliation of the lease liability at January 1, 2019 is as follows:

In USD'000	Financial lease liability
Operating lease commitments disclosed at December 31, 2018	44 171
Contracts reassessed as leasing arrangements	13 389
Operating lease commitments at December 31, 2018 - adjusted	**57 560**
Adjustments as a result of different treatment of extension and termination options	3 717
Short-term and low-value leases recognized on a straight-line basis	-824
Discount using the Group's incremental borrowing rate of 3.40%	-4 321
Total lease obligations at January 1, 2019	**56 132**
Of which are:	
Short-term lease obligations	16 775
Long-term lease obligations	39 356
	56 132

The associated right-of-use assets were measured at an amount equal to the lease liabilities, adjusted for any prepaid or accrued lease payments relating the that lease recognized in the balance sheet at December 31, 2018. For leases subject to a sublease arrangement, no right-of-use asset was recognized and instead the amounts to be received were reflected in the balance sheet as financial assets at amortized cost. The recognized right-of-use assets relate to the following types of assets:

In USD'000	31.12.2019	1.1.2019
Land and buildings	35 962	47 128
Vehicles, equipment and other	5 555	5 988
	41 517	**53 116**

The change in accounting policy affected the following items in the balance sheet on January 1, 2019:

In USD'000	1.1.2019
Right-of-use assets	53 116
Deferred income tax assets	-114
Financial assets at amortized cost - long-term portion	1 359
Financial assets at amortized cost - short-term portion	825
Other current assets	-503
Total assets	**54 682**
Reserves	-429
Long-term lease obligations	39 356
Short-term lease obligations	16 775
Other current liabilities	-1 021
Total equity and liabilities	**54 682**

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 December 31, 2019	**770**	**47 535**	**7 961**	**198**	**–**	**56 464**
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	-0	-26	-12	-0	–	-39
As of December 31, 2019	**-39**	**-12 304**	**-2 550**	**-54**	**–**	**-14 946**
Net book values as of December 31, 2019	**732**	**35 230**	**5 411**	**144**	**–**	**41 517**
Useful life in years	4 – 10	5 – 10	2 – 5	2 – 5	2 – 5	

Lease costs, which were previously fully recognized as an operational expense, are now recorded in the income statement as depreciation expense in the amount of kUSD 16 150 and interest expense of 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 16 966 which represent the reduction of the lease liability are recognized in the cash flow statement as an outflow from financing activities, which were previously fully recognized as an outflow from operating activities. Operating lease costs relating to short-term leases of kUSD 5 935 and low-value leases of kUSD 267 remain fully recognized as an operational expense. The total cash outflow for leases in 2019 was kUSD 24 760.

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

In USD'000	2019
Within one year	15 548
In the second to fifth year inclusive	25 283
More than five years	3 208
	44 039

In addition, the Group owns certain property which is leased to third-parties under operating lease arrangements. These arrangements are not significant to the Group's operations or financial results, and therefore no further disclosure is deemed necessary.

In applying IFRS 16 for the first time, the Group has elected to use the following practical expedients permitted by the standard:
- use of a single discount rate to a portfolio of leases with reasonably similar characteristics;
- the exclusion of initial direct costs for the measurement of the right-of-use assets at the date of initial application, and
- the use of hindsight in determining the lease term where the contract contains options to extend or terminate.

The Group has also elected not to reassess whether a contract is, or contains a lease at the date of initial application. Instead, for contracts entered into before the transition date the Group relied on its assessment made applying IAS 17 and IFRIC 4 Determining whether an Arrangement contains a Lease.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

5. 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 Cybersecurity division is a combination of organic developments and the former acquisitions of Milestone Systems, Inc. and M&S Technologies.

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. Segment operating income is based on the same accounting policies as consolidated operating income 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 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**

In USD'000	Digital TV 2018	Public Access 2018	Cyber-security 2018	Internet of Things 2018	Total 2018
Revenues from external customers	443 520	368 395	94 290	1 999	908 205
Other operating income	9 156	2 115	91	120	11 482
Total segment revenue and other operating income	**452 676**	**370 511**	**94 381**	**2 119**	**919 687**
Cost of materials, licenses and services	-57 633	-157 863	-55 292	-4	-270 791
Operating expenses	-323 366	-191 562	-60 431	-21 589	-596 947
Operating income before depreciation, amortization and impairment	**71 678**	**21 086**	**-21 342**	**-19 474**	**51 949**
Depreciation, amortization and impairment	-27 497	-10 407	-4 355	-800	-43 059
Operating income - excluding corporate common functions	**44 181**	**10 679**	**-25 697**	**-20 273**	**8 890**
Corporate common functions					-16 193
Interest expense and other finance income/(expense), net					-10 750
Share of result of associates	355	1 140	–	–	1 495
Income before tax from continuing operations					**-16 558**
	31.12.2018	31.12.2018	31.12.2018	31.12.2018	31.12.2018
Total segment assets	**671 105**	**351 272**	**148 105**	**36 290**	**1 206 772**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

In USD'000	31.12.2019	31.12.2018
Total segment assets	1 175 332	1 206 772
Cash and cash equivalents	2 523	13 021
Other current assets	98	1 193
Financial assets and other non-current assets	4 201	2 627
Asset of disposal group classified as held for sale	11 497	14 401
Total Assets as per Balance Sheet	**1 193 651**	**1 238 014**

GEOGRAPHICAL INFORMATION

The company'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	2019	2018	31.12.2019	31.12.2018
Switzerland	42 668	35 672	69 077	76 126
United States of America	226 823	269 544	242 627	249 459
France	60 163	53 836	8 751	10 687
Norway	7 820	11 228	131 774	139 638
Rest of the world	472 726	537 925	89 139	91 021
	810 201	**908 205**	**541 368**	**566 931**

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	2019	2018	2019	2018	2019	2018	2019	2018
Europe	161 846	172 166	190 206	183 309	16 535	12 713	2 029	1 999
Americas	143 685	175 476	92 138	110 251	68 994	81 577	755	–
Asia and Africa	76 668	95 878	56 874	74 835	434	–	38	–
	382 199	**443 520**	**339 218**	**368 395**	**85 962**	**94 290**	**2 822**	**1 999**
Sale of goods	96 835	116 650	202 375	230 344	26 523	30 532	211	–
Services rendered	194 188	223 156	94 684	103 806	37 299	37 965	2 520	1 999
Royalties and licenses	91 176	103 715	42 159	34 245	22 140	25 793	91	–
	382 199	**443 520**	**339 218**	**368 395**	**85 962**	**94 290**	**2 822**	**1 999**

2019 total revenues and other operating income amount to kUSD 827 277 (2018: kUSD 981 029 including revenues from discontinued operations).

6. OTHER OPERATING INCOME

In USD'000	2019	2018
Government grants (research, development and training)	8 863	5 878
Gain on disposal of subsidiary	–	790
Income from rental of property	4 487	3 634
Gains/(losses) on disposal of assets	-502	-127
Contingent consideration received	1 000	–
Services rebilled to discontinued operation	2 000	–
Others	1 229	1 307
	17 076	**11 482**

7. EMPLOYEE BENEFITS EXPENSE

In USD'000	Note	2019	2018
Wages and salaries		325 748	358 125
Social security costs		46 711	51 074
Defined benefit plans expenses	28	11 803	10 659
Defined contribution plans expenses		8 513	10 091
Other personnel expenses		14 843	18 139
		407 617	**448 087**

8. OTHER OPERATING EXPENSES

In USD'000	2019	2018
Development and engineering expenses	14 034	17 755
Travel, entertainment and lodging expenses	31 365	34 833
Legal, experts and consultancy expenses	20 787	25 565
Administration expenses	21 799	26 223
Building and infrastructure expenses	14 235	30 533
Marketing and sales expenses	5 613	6 405
Taxes other than income tax	3 251	3 908
Change in provisions	4 667	8 850
Insurance, vehicles and others	8 100	10 980
	123 850	**165 053**

9. DEPRECIATION, AMORTIZATION AND IMPAIRMENT

In USD'000	Note	2019	2018
Land and buildings	14	4 638	5 050
Equipment and machines	14	11 281	11 751
Total depreciation and impairment of tangible fixed assets		**15 919**	**16 801**
Land and buildings	4	13 151	–
Vehicles, equipment and other	4	2 999	–
Total depreciation and impairment of right-of-use assets		**16 150**	**–**
Intangible assets	15	23 781	26 258
Total amortization and impairment on intangible fixed assets		**23 781**	**26 258**
Depreciation, amortization and impairment		**55 850**	**43 059**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

10. INTEREST EXPENSE

In USD'000	Note	2019	2018
Interest expense:			
- Bond 2015-2022	27	3 921	3 976
- Bond 2016-2024	27	2 363	2 397
- Net interest expense recognized on defined benefit plans	28	822	609
- Other and bank charges		3 076	3 458
		10 182	**10 440**

11. OTHER FINANCE INCOME/(EXPENSE), NET

In USD'000	Note	2019	2018
Interest income		1 796	3 007
Net gains/(losses) on foreign exchange related derivative financial instruments		319	246
Net foreign exchange transaction gains/(losses)		-1 865	-2 299
Others		-1 955	-1 264
		-1 705	**-310**

Changes in the fair value of financial assets at fair value through OCI were kUSD 0 (2018: kUSD -153) and recognized directly in other comprehensive income.

12. INCOME TAX EXPENSE

In USD'000	Note	2019	2018
Current income tax		-13 310	-12 365
Deferred income tax	17	1 574	6 643
Non-refundable withholding tax		-1 577	-2 019
		-13 312	**-7 741**

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	2019	2018
Income before tax	**-25 256**	**-16 558**
Expected tax calculated at domestic tax rates in the respective countries	3 422	4 835
Effect of income not subject to income tax or taxed at reduced rates	2 489	2 280
Effect of tax restructuring	-2 331	–
Effect of utilization of previously unrecognized tax asset on tax losses carried forward and temporary differences	3 185	4 435
Effect of temporary differences and tax losses not recognized and deferred tax assets written-off	-16 441	-14 207
Effect of changes in tax rates	-294	1 299
Effect of associates' result reported net of tax	468	285
Effect of disallowed expenditures	-4 353	-6 163
Effect of prior year income taxes	668	-329
Effect of non-refundable withholding tax	-1 577	-2 019
Other	1 452	1 843
Tax expense	**-13 312**	**-7 741**

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 1 385 (2018: kUSD 1 426) and is included in 'Other' in 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 decreased from 29.2% in 2018 to 13.6% in 2019. The decrease can be explained by a different revenue split between countries and an overall global decline in tax rates, resulting in a more favorable tax rate in several jurisdictions.

13. 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	2019	2018
Net income attributable to bearer shareholders	-40 733	-26 037
- Continuing operations	*-40 733*	*-29 071*
- Discontinued operations	*-*	*3 034*
Net income attributable to registered shareholders	-3 764	-2 416
- Continuing operations	*-3 764*	*-2 698*
- Discontinued operations	*-*	*282*
Total net income attributable to equity holders	**-44 497**	**-28 453**
Weighted average number of bearer shares outstanding	50 103 651	49 897 528
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)	-0.8130	-0.5218
- Continuing operations	*-0.8130*	*-0.5826*
- Discontinued operations	*-*	*0.0608*
Attributable to shareholders of Kudelski SA for registered shares : basic and diluted (in USD)	-0.0813	-0.0522
- Continuing operations	*-0.0813*	*-0.0583*
- Discontinued operations	*-*	*0.0061*

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 2019

14. TANGIBLE FIXED ASSETS

In USD'000	31.12.2019	31.12.2018
Land and buildings	94 722	94 952
Equipment and machines	32 061	33 224
	126 783	**128 176**

LAND AND BUILDINGS

In USD'000	Land	Buildings	Building improvements	Total
GROSS VALUES AT COST				
As of January 1, 2018	**21 644**	**110 088**	**19 137**	**150 869**
Additions	–	2 362	1 655	4 017
Disposals and retirements	–	-157	-4 877	-5 034
Currency translation effects	-135	-1 428	-382	-1 945
Reclassification & others	–	-1 288	315	-973
As of January 1, 2019	**21 509**	**109 577**	**15 848**	**146 934**
Additions	2 493	886	1 003	4 381
Disposals and retirements	–	-5	-226	-231
Currency translation effects	323	677	-12	988
Reclassification & others	–	–	-444	-444
As of December 31, 2019	**24 325**	**111 134**	**16 170**	**151 629**
ACCUMULATED DEPRECIATION AND IMPAIRMENT				
As of January 1, 2018	**–**	**-40 385**	**-12 543**	**-52 928**
Systematic depreciation	–	-3 174	-1 876	-5 050
Disposals and retirements	–	437	4 601	5 038
Currency translation effects	–	691	197	888
Reclassification & others	–	79	-8	71
As of January 1, 2019	**–**	**-42 352**	**-9 629**	**-51 981**
Systematic depreciation	–	-2 868	-1 770	-4 638
Disposals and retirements	–	–	145	145
Currency translation effects	–	-457	-14	-471
Reclassification & others	–	–	38	38
As of December 31, 2019	**–**	**-45 677**	**-11 229**	**-56 906**
Net book values as of December 31, 2018	**21 509**	**67 224**	**6 220**	**94 952**
Net book values as of December 31, 2019	**24 325**	**65 457**	**4 941**	**94 722**
Useful life in years	Indefinite	10 – 50	4 – 8	

In USD'000	31.12.2019	31.12.2018
Corporate buildings on land whose owner has granted a permanent and specific right of use	13 708	14 033

EQUIPMENT AND MACHINES

In USD'000	Technical equipment and machinery	Other equipment	Total
GROSS VALUES AT COST			
As of January 1, 2018	**168 584**	**14 917**	**183 501**
Additions	9 636	1 892	11 528
Impact of business combinations	77	–	77
Disposals and retirements	-75 319	-3 806	-79 125
Currency translation effects	-1 829	-605	-2 434
Reclassification & others	-4 351	4 800	450
As of January 1, 2019	**96 800**	**17 197**	**113 997**
Additions	7 518	1 752	9 270
Disposals and retirements	-3 429	-1 835	-5 264
Currency translation effects	150	40	190
Reclassification & others	1 016	1 040	2 056
As of December 31, 2019	**102 054**	**18 195**	**120 249**
ACCUMULATED DEPRECIATION AND IMPAIRMENT			
As of January 1, 2018	**-134 466**	**-10 307**	**-144 774**
Systematic depreciation	-9 573	-2 036	-11 609
Impairment	-142	–	-142
Disposals and retirements	71 001	3 726	74 727
Currency translation effects	714	388	1 102
Reclassification & others	3 499	-3 576	-76
As of January 1, 2019	**-68 967**	**-11 806**	**-80 773**
Systematic depreciation	-8 358	-2 306	-10 664
Impairment	-260	-357	-617
Disposals and retirements	2 923	1 488	4 410
Currency translation effects	-460	-46	-506
Reclassification & others	-20	-19	-38
As of December 31, 2019	**-75 142**	**-13 046**	**-88 188**
Net book values as of December 31, 2018	**27 832**	**5 392**	**33 224**
Net book values as of December 31, 2019	**26 911**	**5 149**	**32 061**
Useful life in years	4 – 10	4 – 7	

Technical equipment and machinery includes assets made available to clients which generate recurring service revenue. 2018 disposals and retirements relate to assets made available to customers where the customer agreements have been renegotiated and the assets are no longer made available to such customers.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

15. 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, 2018	**130 985**	**72 383**	**89 517**	**358 999**	**503**	**652 388**
Additions	1 979	3 322	7 087	–	–	12 388
Impact of business combinations	–	2 389	–	3 464	–	5 853
Disposals and retirements	-0	–	-3 831	–	-0	-3 831
Reclassification & others	57	-3 322	3 844	–	-57	522
Currency translation effects	-3 106	-3 203	-1 230	-9 245	-15	-16 798
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 December 31, 2019	**112 965**	**71 302**	**97 604**	**351 246**	**426**	**633 543**
ACCUMULATED DEPRECIATION AND IMPAIRMENT						
As of January 1, 2018	**-108 926**	**-26 420**	**-65 412**	**–**	**-492**	**-201 250**
Systematic amortization	-7 951	-9 402	-8 483	–	-5	-25 841
Impairment	-398	–	-19	–	–	-417
Recovery of amortization on disposal and retirements	–	–	3 809	–	–	3 809
Reclassification & others	-52	–	–	–	57	5
Currency translation effects	2 546	1 498	840	–	14	4 898
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 December 31, 2019	**-103 889**	**-42 978**	**-78 840**	**–**	**-426**	**-226 133**
Net book values as of December 31, 2018	**15 133**	**37 245**	**26 123**	**353 217**	**5**	**431 724**
Net book values as of December 31, 2019	**9 076**	**28 324**	**18 763**	**351 246**	**0**	**407 410**
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 impairments of Technology assets in 2018 and 2019 were due to commercial initiatives abandoned during such years. The impairment of Software assets in 2019 relates to an ERP system that was discontinued following the integration of a subsidiary.

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 5).

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:

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					

2018	Carrying amount	Period of cash flow projections	Annual sales growth	Annual margin evolution	Terminal growth rate	Pre-tax discount rate
Goodwill CGU						
Digital TV	215 832	5 years	-12% to 0%	Declining	1.5%	10.00%
Public Access	35 959	5 years	3% to 5%	Stable	2.0%	11.00%
Cybersecurity	65 354	5 years	14% to 21%	Improvement	3.0%	10.00%
IoT	36 072	5 years	71% to 155%	Improvement	3.0%	10.00%
	353 217					

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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

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 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 2019, Cybersecurity revenues were lower than in previous business plans, as the segment continues to see the market increasingly moving from on-premise solutions to software based and service deployments. In 2020, Cybersecurity is expected to return to growth 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)

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 the Group expects to maintain the current run rate of R&D spending in the IoT segment.

As the IoT segment is still in its infancy stage with the commercial release of its security platform in 2019, initial contracts signed during 2018 began generating their first revenues in 2019. Segment management forecasts material revenue growth to occur by the end of 2021, with total segment revenues exceeding USD 10 million at this time. Based on the high operating leverage of the IoT product line, the Group expects that this segment will reach break-even towards the end of the planning period following a cumulative investment of over USD 100 million.

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 2019, the Group initiated structural measures within the Public Access segment aimed at simplifying the corporate entities and management structure, integration of regional subsidiaries to the Group's ERP and supply chain tools and overall streamlining of overhead functions. These efforts are expected to stabilize the segments cost base and allow for continued top line growth.

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. A loss of recurring revenues of USD 4 million or a 3% reduction of the assumed annual growth rate in the Cybersecurity segment and a 12% 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.

16. INVESTMENTS IN ASSOCIATES

In USD'000	2019	2018
At January 1	**6 191**	**5 858**
Share of profit	1 901	1 495
Dividends received	-1 871	-936
Currency translation effects	89	-226
At December 31	**6 309**	**6 191**

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

		Interest held	
Name of associate	**Principal activity**	**2019**	**2018**
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%	* 16%

*Through a shareholder agreement, Kudelski Group is entitled to appoint and has appointed one board member of Kryptus Segurança da Informaçao Ltda. and participates in significant financial and operating decisions. The Group has therefore determined that it has significant influence over this entity, even though it only holds 16% of the voting rights.

SUMMARIZED FINANCIAL INFORMATION OF THE GROUP'S ASSOCIATES

In USD'000	31.12.2019	31.12.2018
Total assets	38 070	34 502
Total liabilities	22 438	18 586
Net assets	15 632	15 904
Group's share of associates' net assets	4 952	4 837

	2019	2018
Revenue	46 505	50 211
Result of the period	6 494	4 987
Group's share of associates' result for the period	1 901	1 495

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	31.12.2019	31.12.2018
Deferred tax assets	57 785	61 612
Deferred tax liabilities	-4 282	-6 878
	53 504	**54 734**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

Movement on the deferred income tax account is as follows:

In USD'000	Note	2019	2018
At January 1		**54 734**	**48 732**
Exchange differences		116	-1 937
Recognized against other comprehensive income		-2 921	1 506
Change in scope of consolidation		–	-210
Income statement (expense)/income	12	1 574	6 643
At December 31		**53 504**	**54 734**

The movement in deferred tax assets and liabilities during 2019, without taking into consideration the offsetting of balances within the same tax jurisdiction, is as follows:

In USD’000	At January 1, 2019	Income statement effect	Change in scope of consolida-tion	Other Compre-hensive 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
- inter-company 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**

And for 2018:

In USD’000	At January 1, 2018	Income statement effect	Change in scope	Other Compre-hensive income	Currency translation effects	At December 31, 2018
Deferred tax assets associated with						
- intangibles	7 442	-2 387	–	–	-53	5 001
- employee benefits	7 607	182	–	1 475	-150	9 115
- tax losses	35 164	4 162	–	–	-901	38 425
- provisions and other elements tax deductible when paid	1 893	5 906	322	31	-969	7 183
- inter-company profit elimination	5 544	-339	–	–	-46	5 160
- others	-150	1 250	-162	–	-120	818
Total deferred tax assets (gross)	**57 501**	**8 774**	**160**	**1 506**	**-2 238**	**65 703**
Deferred tax liabilities associated with						
- affiliates and allowances for Group companies	6	–	-6	–	–	–
- intangibles	-8 187	2 526	-465	–	308	-5 817
- provisions and accelerated tax depreciation	-1 054	-3 270	100	–	-45	-4 268
- others	466	-1 388	–	–	38	-884
Total deferred tax liabilities (gross)	**-8 769**	**-2 131**	**-371**	**–**	**302**	**-10 969**
Net deferred tax asset/(liability)	**48 732**	**6 643**	**-210**	**1 506**	**-1 937**	**54 734**

Included in change in scope are the impacts of business combinations and reclassification of deferred taxes to discontinued operations at December 31, 2018.

UNRECOGNIZED TAX LOSSES CARRIED FORWARD

At the balance sheet date, the Group has unused tax losses and temporary differences of mUSD 1 440.0 (2018: mUSD 1 177.9) available for offset against future profits. A deferred tax asset has been recognized in respect of mUSD 475.8 (2018: mUSD 404.1) of such losses and temporary differences. No deferred tax asset has been recognized for the remaining mUSD 964.2 (2018: mUSD 773.8) 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	2019	2018
Expiration within:		
One year	38.8	4.3
Two years	36.2	46.2
Three years	44.7	34.3
Four years	31.1	40.5
Five years	120.4	69.4
More than five years	693.0	579.1
Total	**964.2**	**773.8**

18. FINANCIAL ASSETS AND OTHER NON-CURRENT ASSETS

In USD'000	31.12.2019	31.12.2018
Financial assets at amortized cost:		
Loan – third party	12 579	11 506
State and government institutions	13 078	18 273
Trade accounts receivable (long-term portion)	26 155	34 725
Guarantee deposits	2 445	2 249
Prepaid expenses and accrued income (long-term portion)	139	497
Total financial assets at amortized cost	**54 395**	**67 251**
Financial assets at fair value through comprehensive income:		
Equity instruments (level 3)	517	508
Total financial assets at fair value through comprehensive income	**517**	**508**
Other non-current assets:		
Deferred contract cost	176	386
Deferred rent	866	841
Total other non-current assets	**1 042**	**1 227**
Total	**55 953**	**68 985**

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 1.93% (2018: 2.00%). 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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

19. INVENTORIES

In USD'000	31.12.2019	31.12.2018
Raw materials	3 212	3 423
Work in progress	5 379	5 917
Finished goods	56 872	50 529
	65 463	**59 868**

The cost of inventories recognised as an expense includes kUSD 2 716 (2018: kUSD 180) in respect of write-downs, and has been reduced by kUSD 22 (2018: kUSD 399) 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 7 397 (2018: kUSD -3 070).

20. TRADE ACCOUNTS RECEIVABLE AND CONTRACT ASSETS

In USD'000	31.12.2019	31.12.2018
Trade accounts receivable	241 431	291 641
Less: provision for impairment	-29 397	-36 780
Trade accounts receivable related parties	2 363	2 231
Trade accounts receivable - net	**214 397**	**257 092**
Contract assets	58 084	60 345
Less: provision for impairment	-128	-358
Contract assets - net	**57 956**	**59 987**

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	2019	2018	2019	2018
December 31,	**-358**	**-30**	**-36 780**	**-26 453**
Amounts restated through opening retained earnings	–	-79		-2 345
January 1,	**-358**	**-109**	**-36 780**	**-28 797**
Reclassified to (from) held for sale	–	–	–	-1 668
Provision for impairment charged to income statement	-19	-285	-7 645	-10 645
Utilization	–	–	11 904	122
Reversal	245	30	3 272	3 798
Change in scope	–	–	–	-753
Translation effects	4	6	-149	1 164
December 31,	**-128**	**-358**	**-29 397**	**-36 780**

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 -7 645 (2018: kUSD -10 645). Amounts charged to the provision for impairment account are written-off when there is no expectation to recover additional cash.

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, 2019 and 2018 were determined as follows:

In USD'000	Gross carrying amount	Expected loss rate	Provision for impairment 31.12.2019	Gross carrying amount	Expected loss rate	Provision for impairment 12.31.2018
Trade accounts receivable not overdue	121 184	0.1%	123	144 167	0.1%	114
Past due:						
- not more than one month	37 964	0.4%	141	40 771	0.3%	134
- more than one month and not more than three months	25 807	0.9%	239	28 849	0.6%	184
- more than three months and not more than six months	12 023	6.7%	805	22 169	1.7%	377
- more than six months and not more than one year	15 562	45.8%	7 124	19 909	28.1%	5 591
- more than one year	28 890	72.6%	20 966	35 776	84.9%	30 380
Total	**241 431**		**29 397**	**291 641**		**36 780**
Contract assets	58 084	0.2%	128	60 345	0.6%	358
Total	**58 084**		**128**	**60 345**		**358**

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	31.12.2019	31.12.2018
Other receivables - third parties	11 293	7 488
Other receivables - related parties	1 307	1 279
Advances to suppliers and employees	3 151	2 276
State and government institutions	32 646	28 773
Loans third parties - short-term portion	–	1 204
	48 396	**41 021**

The effective interest rate on short-term third party loans was 2.86% (2018: 4.34%).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

22. OTHER CURRENT ASSETS

In USD'000	31.12.2019	31.12.2018
Prepaid expenses	10 580	11 518
Accrued income	14 632	10 408
Deferred contract cost (short-term portion)	217	364
Other receivables - third parties	160	625
	25 589	**22 915**

23. CASH AND CASH EQUIVALENTS

In USD'000	31.12.2019	31.12.2018
Cash at bank and in hand	65 929	83 082
Short-term deposits	8 667	2 897
	74 596	**85 979**

The effective interest rate on short term deposits was 0.71% (2018: 0.98%). The Group only enters into transactions with highly rated banks.

24. SHARE CAPITAL

ISSUED AND FULLY PAID SHARE CAPITAL

The share capital consists of 50 115 192 (2018: 49 910 873) bearer shares at CHF 8.00 par value each and 46 300 000 (2018: 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 335 101 (2018: kUSD 333 456).

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 March 2020 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 (2018: 10 000 000) bearer shares at CHF 8.00 each to satisfy convertible bond exercise right and 698 564 (2018: 402 883) 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:

As at December 31, 2019 (in USD'000)	Nagrastar	275, Sacramento Street LLC
Non-controlling interests percentage	**50.0%**	**50.1%**
Non-current assets	1 558	36 730
Current Assets	43 699	750
Non-current liabilities	–	4 550
Current liabilities	12 402	178
Total Equity	**32 855**	**32 752**
Non-controlling interests percentage	50%	50.1%
Theoritical amount of non-controlling interests	16 427	16 409
Carrying amount of non-controlling interests	**16 427**	**16 409**
Revenue	23 620	4 139
Net result	8 734	2 329
Total comprehensive income	8 734	2 329
Total comprehensive income allocated to non-controlling interests	4 367	1 167
Dividend paid to non controlling interests	-5 000	–
Net increase /(decrease) in cash and cash equivalents	-1 206	334

As at December 31, 2018 (in USD'000)	Nagrastar	275, Sacramento Street LLC
Non-controlling interests percentage	**50.0%**	**50.1%**
Non-current assets	1 660	36 772
Current Assets	42 769	552
Non-current liabilities	–	6 700
Current liabilities	10 308	201
Total Equity	**34 121**	**30 422**
Non-controlling interests percentage	50%	50.1%
Theoritical amount of non-controlling interests	17 060	15 242
Carrying amount of non-controlling interests	**17 060**	**15 242**
Revenue	22 979	4 292
Net result	8 588	2 383
Total comprehensive income	8 588	2 383
Total comprehensive income allocated to non-controlling interests	4 294	1 194
Net increase /(decrease) in cash and cash equivalents	10 363	-56

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 2019

26. LONG TERM FINANCIAL DEBT

In USD'000	Note	31.12.2019	31.12.2018
CHF 200 million 1.875% bond 2015/2022	27	206 279	202 591
CHF 150 million 1.5% bond 2016/2024	27	154 547	151 795
Long-term bank loans		32 203	43 715
Other long-term financial liabilities		–	60
		393 029	**398 161**

Long term bank loans effective interest rate is 0.75% (2018: 0.78%).

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	2019	2018
Initial balance	**354 386**	**357 443**
Amortization of transaction costs less premium	211	210
Currency translation effects	6 229	-3 267
Liability component as of December 31	**360 826**	**354 386**
of which:		
- long-term portion (bond 2015/2022)	206 279	202 591
- long-term portion (bond 2016/2024)	154 547	151 795
	360 826	**354 386**

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 (2018: twelve) 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	31.12.2019	31.12.2018
Fair value of plan assets	191 568	166 457
Defined benefit obligation	-242 640	-232 775
Funded status	**-51 072**	**-66 319**
Other comprehensive income	-4 277	-25 879
Prepaid/(accrued) pension cost	-46 795	-40 440
Funded status	**-51 072**	**-66 319**

In accordance with IAS 19, the following amount is recorded as net pension cost in the income statement for the financial years 2019 and 2018:

In USD'000	Note	2019	2018
Service cost		-17 247	-17 989
Employees contributions		5 202	5 500
Amortization of gains/(losses)		242	167
Curtailment gain / (loss)		–	1 845
Impact of plan amendment		–	-181
Total recognized in employee benefits expense	**7**	**-11 803**	**-10 659**
Interest cost		-2 472	-2 190
Interest income		1 650	1 582
Total recognized in interest expense	**10**	**-822**	**-609**
Net pension (cost)/income		**-12 624**	**-11 267**

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

The main assumptions used for the calculation of the pension cost and the defined benefit obligation for the years 2019 and 2018 are as follows:

	31.12.2019	31.12.2018
Switzerland		
Financial assumptions:		
- Discount rate	0.20%	1.00%
- Rate of future increase in compensations	1.50%	1.50%
- Rate of future increase in current pensions	0% for 5 years, then 0.75%	0.75%
Demographic assumptions:		
- Interest rate credited on savings accounts	1.00%	1.00%
- Turnover *(on average)*	12.0%	10.0%
- Demographic basis	LLP 2015 generational probability risk for disability reduced 50%	LLP 2015 generational
- Retirement payment form	75% pension, 25% lump sum	100% pension
Abroad		
- Discount rate	1.23%	2.17%
- Rate of future increase in compensations	2.80%	3.13%
- Turnover *(on average)*	9.7%	8.5%

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

	31.12.2019	31.12.2018
Weighted average duration of the defined benefit obligation in years		
Switzerland	20.5	23.5
Abroad	11.9	11.8

The changes in defined benefit obligation and fair value of plan assets during the years 2019 and 2018 are as follows:

A. Change in defined benefit obligation

In USD'000	2019	2018
Defined benefit obligation as of 1.1.	**-232 775**	**-226 517**
Service cost	-17 247	-17 989
Interest cost	-2 472	-2 190
Change in demographic assumptions	20 547	-1 148
Change in financial assumptions	-27 909	3 762
Other actuarial gains / (losses)	7 731	-967
Benefits payments	13 194	7 951
Exchange rate difference	-3 707	2 659
Curtailment	–	1 845
Plan amendment	–	-181
Defined benefit obligation as of December 31,	**-242 640**	**-232 775**

Changes in demographic assumptions compared to prior year result from analysis of trends over the last six years and the impact is 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	2019	2018
Fair value of plan assets as of 1.1.	**166 457**	**174 206**
Interest income	1 650	1 582
Return on plan assets excluding interest income	21 255	-12 226
Employees’ contributions	5 202	5 500
Employer’s contribution	6 700	6 901
Benefit payments	-13 194	-7 951
Exchange rate difference	3 497	-1 555
Fair value of plan assets as of December 31,	**191 568**	**166 457**

The actual return on plan assets amounts to kUSD 22 905 in 2019 (kUSD -10 644 for the year 2018) and includes an assumed interest income. The estimated employer's contribution to the pension plans for the year 2020 is kUSD 6 311.

The categories of plan assets, all of which are easily convertible to cash, are stated at their fair value at December 31, 2019 and 2018 as follows:

In USD'000	31.12.2019	Proportion in % 31.12.2019	31.12.2018	Proportion in % 31.12.2018
Cash	5 894	3.1%	6 706	4.0%
Swiss bonds	19 034	9.9%	14 063	8.4%
Foreign bonds	50 839	26.5%	41 509	24.9%
Swiss shares	35 932	18.8%	31 994	19.2%
Foreign shares	33 002	17.2%	30 820	18.5%
Real estate	39 101	20.4%	34 405	20.7%
Alternative investments	7 765	4.1%	6 960	4.2%
Total	**191 568**	**100.0%**	**166 457**	**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
2020	9 691	34
2021	9 513	22
2022	8 334	340
2023	7 916	125
2024	7 699	136
2025-2029	36 958	1 057

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 2019 year-end defined benefit obligation		Change in 2018 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	-21 542	-815	-23 473	-740
50 basis point decrease in discount rate	25 266	885	27 779	807
50 basis point increase in rate of salary increase	300	n/a	275	n/a
50 basis point decrease in rate of salary increase	-311	n/a	-289	n/a
50 basis point increase in rate of pension increase	9 021	n/a	15 758	n/a
50 basis point decrease in rate of pension increase	-8 263	n/a	-14 197	n/a
50 basis point increase of interest in saving accounts	7 707	n/a	8 249	n/a
50 basis point decrease of interest in saving accounts	-7 283	n/a	-7 763	n/a
50 basis point increase of turnover	-1 915	n/a	-2 112	n/a
50 basis point decrease of turnover	1 799	n/a	1 972	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.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

29. OTHER LONG TERM LIABILITIES

In USD'000	31.12.2019	31.12.2018
Long-term loans - third parties	5 270	7 383
Deferred consideration	1 558	1 440
Contingent consideration	1 558	2 142
Other long-term liabilities	993	1 649
Deferred income	400	332
	9 780	**12 946**

The effective interest rate on long-term loans is 2.00% (2018: 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	31.12.2019	31.12.2018
Short-term bank borrowings	73 214	63 729
Other short-term financial liabilities	465	394
	73 679	**64 122**

The average effective interest rate paid in 2019 for short term bank borrowings was 1.29% (2018: 1.07%).

31. TRADE ACCOUNTS PAYABLE

In USD'000	31.12.2019	31.12.2018
Trade accounts payable – third parties	60 518	79 607
Trade accounts payable – related parties	55	2
	60 573	**79 608**

32. CONTRACT LIABILITIES

In USD'000	31.12.2019	31.12.2018
Amounts due to customers for contract work	3 962	4 731
Advances from clients	19 129	26 228
Deferred income	22 355	19 611
	45 446	**50 570**

33. OTHER CURRENT LIABILITIES

In USD'000	31.12.2019	31.12.2018
Accrued expenses	73 624	74 738
Deferred consideration	–	57
Contingent consideration (level 3)	682	352
Payable to pension fund	1 921	1 045
Other payables	16 719	19 554
	92 946	**95 746**

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. However, where derivatives do not meet the hedge accounting criteria or where the Group chooses not to designate derivatives as hedging instruments, they are classfied as "held-for-trading" for accounting purposes and are accounted for at fair value through profit or loss.

	Assets		Liabilities	
In USD'000	**31.12.2019**	**31.12.2018**	**31.12.2019**	**31.12.2018**
Cash flow hedge:				
- Foreign currency options	–	64	–	–
Held-for-trading:				
- Foreign currency options	–	–	–	-190
Total of derivatives financial instruments	**–**	**64**	**–**	**-190**

There were no long-term derivative instruments at December 31, 2019 and 2018.

In USD'000	Cost of hedging reserve	Intrinsic value of options	Total hedge reserves
Balance at January 1, 2018	31	219	250
Change in fair value of hedging instruments recognized in OCI	–	42	42
Cost of hedging deferred and recognized in OCI	-42	–	-42
Reclassified from OCI to profit or loss	-31	-219	-250
Balance at December 31, 2018	**-42**	**42**	**0**
Reclassified from OCI to profit or loss	42	-42	-0
Balance at December 31, 2019	**–**	**–**	**–**

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 54 in 2019 (2018: mUSD 92) with maturities between January and December and average strike rate of USD/CHF 0.98 in 2019 (2018: USD/CHF 0.97). 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 2019 and 2018 relating to foreign currency options.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

35. PROVISIONS FOR OTHER LIABILITIES AND CHARGES

In USD'000	Restructuring provisions	Provision for warranty	Litigations and others	Total 2019	Total 2018
As of January 1	**8 933**	**2 327**	**205**	**11 465**	**10 430**
Additional provisions	1 893	186	–	2 079	9 362
Unused amounts reversed	-88	-358	-121	-568	-466
Used during the year	-6 492	-12	–	-6 504	-7 409
Exchange differences	-141	-26	-3	-170	-452
As of December 31	**4 105**	**2 117**	**81**	**6 302**	**11 465**
Thereof:					
- Short-term	4 105	2 117	81	6 302	11 368
- Long-term	–	–	–	–	97
	4 105	**2 117**	**81**	**6 302**	**11 465**

Restructuring provisions

Restructuring provisions in 2019 and 2018 primarily relate to headcount reduction measures impacting the Group's Digital TV operations. In addition, the 2019 and 2018 provisions include 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.

Long-term provisions include an amount for corporate social responsibility actions mandated by the government.

Provision for warranty

Provisions for warranty-related costs are recognised when the product is sold or service provided. Initial recognition is based on historical experience. The initial estimate of warranty-related costs is revised annually.

36. DISCONTINUED OPERATIONS AND ASSETS HELD FOR SALE

In August 2018, the Group reached an agreement to transfer SmarDTV's Conditional Access Module (CAM) and Set-Top-Box businesses to SmarDTV Global, a newly formed entity affiliated with a third-party Buyer. Upfront cash consideration for this transfer amounted to kUSD 20 000, subject to customary closing adjustments relating to the transfer or workforce, selected tangible and intangible assets. Inventories were partially transferred for additional consideration at their net book values. The Group retained certain assets, including buildings, debtors and patents.

In connection with the sale agreement, the Buyer and the Group entered into a commercial relationship whereby the Group would continue to distribute CAMs to Group customers. Continuing operations for the Group primarily represent revenues recognized from the sale of licenses to thrid parties in connection with retained patents, and licenses, sales of CAMs as well as sales commissions.

At December 31, 2019 and 2018, assets classified as held for sale represent buildings retained upon the disposal of the SmarDTV operations. During 2019, one building was sold for gross proceeds of kUSD 2 298. 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	31.12.2019	31.12.2018
Assets classified as held for sale:		
- Tangible fixed assets	11 497	14 401

37. RESEARCH AND DEVELOPMENT

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

In USD'000	2019	2018
Research and development	145 915	162 629

38. DIVIDEND

On April 6, 2019, the Group paid a distribution of CHF 0.10 per bearer share and CHF 0.01 per registered share. The distribution amounted to kUSD 5 508. Since year end, the Board of Directors have proposed a distribution of kUSD 5 656, 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 shares (CHF 0.005 per registered share) from retained earnings at December 31, 2019 and is subject to shareholder approval at the Annual General Meeting. This proposed distribution has not been recorded as a liability in these 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 2019	Shares 2018
Shares underwritten by employees	20 100	22 270
Bonus shares from ESPP	4 020	4 454
Total employee share program	**24 120**	**26 724**
Amount paid by employee (In USD'000)	85	138
Booked corporate charges (excluding social charges) (In USD'000)	38	61
	123	**199**

SHARES ISSUED TO EMPLOYEES

In 2019, 180 199 (2018: 124 394) bearer shares of Kudelski SA were given to employees for no consideration as part of their compensation, of which 89 226 (2018: 64 767) include a seven-year blocking period, 84 723 (2018: 47 127) include a three-year blocking period and 6 250 (2018: 12 500) with no restriction to sale. The fair value recognized for this equity based compensation is kUSD 875 (2018: kUSD 1 150).

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

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 2019	Sale of goods and services 2018	Purchase of goods and services 2019	Purchase of goods and services 2018	Amounts owed to related parties 31.12.2019	Amounts owed to related parties 31.12.2018	Amounts owed by related parties 31.12.2019	Amounts owed by related parties 31.12.2018
APT-Skidata Ltd	5 595	7 053	–	–	55	–	1 792	1 260
SKIDATA Parking System Ltd	1 600	1 493	–	–	–	–	90	171
SKIDATA India Private Limited	246	496	–	–	–	–	97	251
iWedia SA	–	155	120	608	123	125	–	29
Total associated companies	**7 441**	**9 197**	**120**	**608**	**177**	**125**	**1 979**	**1 710**
Audio Technology Switzerland SA	–	–	–	–	–	–	1 673	1 644
Total other related	**–**	**–**	**–**	**–**	**–**	**–**	**1 673**	**1 644**

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	2019	2018
Salaries and other short-term employees benefits	7 131	7 138
Post-employments benefits	50	35
Share-based payments	379	423
	7 560	**7 596**

41. SHAREHOLDINGS AND LOANS

PRINCIPAL SHAREHOLDERS

	Voting rights		Shareholdings	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018
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, 2019 and 2018, the members of the Board of Directors and members of Group management had the following interest in the company (without including shares from 2019 and 2018 variable compensation - issued in 2020 and 2019 respectively):

	31.12.2019	31.12.2018
	Bearer shares	Bearer shares
Board of Directors		
Kudelski André, chairman (as member of the family pool)	10 509 423	10 474 423
Smadja Claude, vice chairman	1 300	1 300
Dassault Laurent, member	705 790	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
Zeller Alexandre, member	–	–
Ross Alec, member	1 250	1 250
Total board members	**11 220 763**	**11 185 763**
Management		
Kudelski André, CEO	see above	see above
Saladini Mauro, CFO	132 325	109 187
Roy Pierre, COO (until August 1, 2019)	–	47 213
Solbakken Morten, COO	26 216	10 834
Goldberg Nancy, CMO	–	–
Total Management (excluding CEO)	**158 541**	**167 234**

The Kudelski family pool also owns 46 300 000 registered shares of Kudelski SA as of December 31, 2019 and 2018.

No loans were granted in 2019 and 2018 to the members of the Board of Directors and Group management.

M. Alexandre Zeller was a member of the Board of Directors until March 1, 2019. In addition, M. Pierre Roy was a member of Group management until August 1, 2019.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

42. CATEGORIES OF FINANCIAL INSTRUMENTS

The financial assets and liabilities are classified as follow as of December 31, 2019:

Assets as per balance sheet date December 31, 2019 (in USD'000)	Note	Derivatives used for hedging	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	Derivatives used for hedging	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	26	–	–	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	30	–	–	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

And for 2018:

Assets as per balance sheet date December 31, 2018 (in USD'000)	Note	Derivatives used for hedging	Financial assets at fair value through profit or loss	Financial assets at fair value through OCI	Financial Assets at amortized costs	Total 31.12.2018
Financial assets and non current assets:						
- equity instruments with no quoted market price (level 3)	18	–	–	508	–	508
- long-term loans	18	–	–	–	11 506	11 506
- state and government institutions	18	–	–	–	18 273	18 273
- trade accounts receivable - long-term portion	18	–	–	–	34 725	34 725
- guarantee deposits	18	–	–	–	2 249	2 249
- prepaid expenses and accrued income (long-term)	18	–	–	–	497	497
Trade accounts receivable	20	–	–	–	257 092	257 092
Other current assets:						
- loans	21	–	–	–	1 204	1 204
- state and government institutions	21	–	–	–	28 773	28 773
- other receivable (third and related parties)	21	–	–	–	8 767	8 767
Cash and cash equivalents	23	–	–	–	85 979	85 979
Derivative financial instruments (level 2)	34	64	–	–	–	64
		64	**–**	**508**	**449 065**	**449 637**

Liabilities as per balance sheet date December 31, 2018 (in USD'000)	Note	Derivatives used for hedging	Financial liabilities at fair value through profit or loss	Financial Liabilities at amortized costs	Total 31.12.2018
Long-term financial debt	26	–	–	398 161	398 161
Other long-term liabilities:					
- deferred consideration	29	–	–	1 440	1 440
- contingent consideration (level 3)	29	–	2 142	–	2 142
- loans and others	29	–	–	9 032	9 032
Short-term financial debt	30	–	–	64 122	64 122
Trade accounts payable	31	–	–	79 608	79 608
Other current liabilities:					
- deferred consideration	33	–	–	57	57
- contingent consideration (level 3)	33	–	352	–	352
- payable to pension fund	33	–	–	1 045	1 045
- other payables	33	–	–	19 554	19 554
- current income tax		–	–	8 848	8 848
Derivative financial instruments (level 2)	34	–	190	–	190
		–	**2 684**	**581 867**	**584 551**

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 2019

The table below illustrates the three hierarchical levels for valuing financial instruments carried at fair value as of December 31, 2019 and 2018:

In USD'000		Note	31.12.2019	31.12.2018
Financial assets at fair value through comprehensive income:				
- derivative financial instruments	Level 2	34	–	64
- equity instuments with no quoted market price	Level 3	18	517	508
Total financial assets			**517**	**572**
Financial liabilities:				
- derivative financial instruments	Level 2	34	–	190
- contingent consideration (short-term portion)	Level 3	33	682	352
- contingent consideration (long-term portion)	Level 3	29	1 558	2 142
Total financial liabilities			**2 240**	**2 684**

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 comprised between 6.6% and 10.2% (2018: 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, 2018	410	-7 781
Settlements	–	6 049
Impairment	-406	–
Remeasurement (recognized in other operating income)	–	-116
Reclassification	512	–
Discount effect (recognized in interest expense)	–	-824
Exchange difference	-4	-54
Currency translation adjustment	-4	232
Balance at December 31, 2018	**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**

Reclassifcation relates to available-for-sale equity instruments with no quoted market price that were previously measured at cost less impairment, which has been reclassifed at fair value through OCI.

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 2019	Fair value 2019	Carrying amount 2018	Fair value 2018
Financial liabilities				
- CHF 200 million bond	206 279	189 134	202 591	143 046
- CHF 150 million bond	154 547	123 339	151 795	86 878

The fair values of the bonds are based on their market prices as of December 31. Limited trading liquidity results in material volatility of such prices.

44. MATURITY ANALYSIS FOR FINANCIAL LIABILITIES

The following table analyses the Group's remaining contractual maturities for its non-derivative financial liabilities. The table is based on the undiscounted cash flows of financial liabilities based on the earliest date on which the Group can be required to pay. The table below includes both interest and principal cash flows. The adjustment columns represent the possible future cash flows attributable to the instrument included in the maturity analysis which are not included in the carrying amount of the financial liability on the balance sheet. Balances due within one year equal their carrying amounts as the impact of discounting is not significant.

In USD'000	Due within 1 year	Due within 1 year	Due > 1 year < 5 years	Due > 1 year < 5 years	Due > 5 years	Due > 5 years	Adjust-ment	Adjust-ment	Total book value	Total book value
	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018
Bonds	6 235	6 127	378 755	223 746	–	154 599	-24 164	-30 086	360 826	354 386
Long-term bank loans	–	–	32 729	39 106	–	5 373	-526	-764	32 203	43 715
Short-term financial debt	73 679	64 122	–	–	–	–	–	–	73 679	64 122
Trade accounts payable	60 573	79 608	–	–	–	–	–	–	60 573	79 608
Other payables	16 719	19 554	–	–	–	–	–	–	16 719	19 554
Total	**157 205**	**169 411**	**411 484**	**262 852**	**–**	**159 972**	**-24 689**	**-30 850**	**544 000**	**561 386**

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% (2018: 10%) increase and decrease in the CHF and a 10% (2018: 10%) increase or decrease in the EUR compared to the presentation currency. The sensitivity rate used approximates the fluctuation considered by management when performing risk analysis. The sensitivity analysis includes only outstanding foreign currency-denominated monetary items and adjusts their translation at period end for the above mentioned change in foreign currency rates. The sensitivity analysis includes external loans as well as loans to foreign operations within the Group where the denomination of the loan is in a currency other than the currency of the lender or the borrower. A positive number indicates an increase in post-tax profit when the foreign currency strengthens against the relevant currency.

	CHF		EUR	
In USD'000	2019	2018	2019	2018
Post-tax net income				
- Increase	-10 502	-5 592	-1 062	-2 758
- Decrease	10 502	6 755	1 062	2 758
Comprehensive income (post-tax effect)				
- Increase	-23 502	-21 741	–	-1 100
- Decrease	23 502	23 631	–	1 100

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

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 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:

- USD: increase of 200 basis points and decrease of 50 basis points (2018: 200 basis points increase or 50 decrease)
- EUR: increase of 100 basis points and decrease of 100 basis points (2018: 100 basis points increase or 100 decrease)
- CHF: increase of 100 basis points and decrease of 100 basis points (2018: 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, 2019 would increase by kUSD 415 and increase by kUSD 78, respectively. (2018: increase by kUSD 578 and increase by kUSD 78). This is mainly due to the interest rate exposure on cash balances.
- other comprehensive income would not be impacted in 2019 and 2018.

Equity prices

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

46. COLLATERAL RECEIVED AND GIVEN

In USD'000	31.12.2019	31.12.2018
Guarantees in favor of third parties	21 402	34 120

47. RISK CONCENTRATION

At December 31, 2019 and 2018, 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, 2019 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, 2019 was 8.7% (2018: -1.3%).

2019 operating cash flow was positive USD 34.2 million. 2018 operating cash flow was negative USD 4.7 million mainly due to additional working capital requirements at SKIDATA.

50. NET DEBT RECONCILIATION

In USD'000	31.12.2019	31.12.2018
Cash and cash equivalents	74 596	85 979
Long-term financial debt	-393 029	-398 161
Long-term lease obligations	-28 491	–
Short-term financial debt	-73 679	-64 122
Short-term lease obligations	-15 548	–
Net debt	**-436 151**	**-376 304**

In USD'000	Note:	Cash and cash equivalents	Long-term debt	Short-term debt	Lease obligations	Total
Net debt at January 1, 2018		**71 911**	**-357 528**	**-66 902**	**–**	**-352 519**
Cash flows		16 875	–	–	–	16 875
Reimbursment of bank overdrafts, long-term loans		–	20	23 205	–	23 225
Increase in bank overdrafts, long-term loans		–	-45 067	-23 377	–	-68 444
Foreign exchange adjustments		-2 807	4 624	2 952	–	4 769
Amortization of transaction cost less premium	27	–	-210	–	–	-210
Net debt at December 31, 2018		**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 and lease obligations		–	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**

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	
	2019	2018	2019	2018
1 CHF	1.0331	1.0152	1.0063	1.0212
1 EUR	1.1229	1.1452	1.1195	1.1792
100 CNY	14.3595	14.5279	14.4795	15.1070
100 NOK	11.4029	11.5086	11.3713	12.2837
1 GBP	1.3254	1.2802	1.2767	1.3333
100 BRL	24.8967	25.7868	25.3799	27.4918
100 INR	1.4050	1.4315	1.4205	1.4608
1 SGD	0.7438	0.7340	0.7331	0.7407
100 ZAR	7.1281	6.9442	6.9236	7.5674
100 RUB	1.6105	1.4315	1.5462	1.5957
1 AUD	0.7025	0.7046	0.6954	0.7461

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS 2019

53. APPROVAL OF FINANCIAL STATEMENTS

The consolidated financial statements were approved by the Board of Directors and authorised for issuance on February 26, 2020.

54. PRINCIPAL OPERATING COMPANIES

Company	Place of incorporation	Activity	Digital TV	Cyber-security	Internet of Things	Public Access	Corporate	Percentage held 2019	Percentage held 2018
Nagravision SA	CH – Cheseaux	Solutions for Digital TV	•	•	•			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
SmarDTV SA	CH – Cheseaux	Conditional access modules and set-top-boxes	•					100	100
NagraStar LLC	US – Englewood	Smartcards and digital TV support	•					50	50
OpenTV Inc	US – Delaware	Middleware for set-top-boxes	•					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 2019

pwc

Report of the statutory auditor

to the General Meeting of Kudelski SA

Cheseaux-sur-Lausanne

Report on the audit of the consolidated financial statements

Opinion

We have audited the consolidated financial statements of Kudelski SA and its subsidiaries (the Group), which comprise the consolidated income statements and consolidated statements of comprehensive income for the year ended 31 December 2019, the consolidated balance sheets as at 31 December 2019, 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 3 to 57) give a true and fair view of the consolidated financial position of the Group as at 31 December 2019 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.

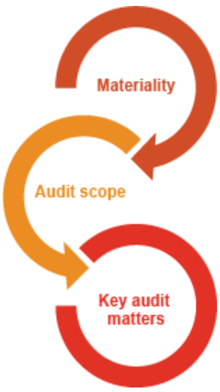
Basis for opinion

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 IESBA Code of Ethics for Professional Accountants, 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 4'100'000

We conducted full scope audit work at eight reporting components in six countries. In order to increase our coverage, we also performed certain specified procedures at one entity. Our audit scope addressed 70% of the Group’s revenue.

As key audit matter the following area of focus has been identified:

• Goodwill impairment Cybersecurity and Internet of Things

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 4'100'000
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 410'000 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 79 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 9 reporting components which represent the principal business operations of the Group. 8 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 8 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 15 to the consolidated financial statements, the Group has Goodwill totaling USD 351.2 million at December 31, 2019, comprising USD 65 million related to the Cybersecurity segment and USD 35.9 million related to the Internet of Things segment.	We assessed the Company's allocation of goodwill to the CGUs Cybersecurity and Internet of Things by assessing the reasonableness of the CGUs taking into consideration management reporting and that CGU's for goodwill impairment testing purposes are not larger than any of the Group's operating segments.

We focused on these areas in view of the significance of the amounts involved, the business segments' operating performance during 2019 and judgement involved by management about future results. The assessment of the carrying value of the goodwill balances is dependent on the estimation of future cash flows. Judgement is required to estimate future cash flows and a suitable discount rate. Refer to note 2 – Critical accounting estimates and judgements and note 15 – Intangible assets for details of management's impairment test and assumptions.	We obtained the Group's impairment analysis for CGUs Cybersecurity and Internet of Things and performed the following procedures: - Tested the mathematical accuracy of the model and traced amounts to underlying financial statement and other information, as applicable. - Assessed the quality of the cash flow projections by comparing the actual results to prior year budget to identify in retrospect whether any of the assumptions might have been too optimistic. - Reconciled the 5 year projections to the budget that was subject to scrutiny and approval by the Board of Directors and gained an understanding of the process undertaken to develop the projections. - We challenged 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 9% applied to those future cash flows. We obtained the Group's sensitivity analyses around key assumptions to ascertain the effect of 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 of the annual report. On the basis of the evidence obtained from our audit, we consider the valuation method and the assumptions used used by the Group to be an appropriate and adequate basis 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 to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

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	Mario Berckmoes
Audit expert Auditor in charge	Audit expert

Lausanne, 26 February 2020

BALANCE SHEETS AT DECEMBER 31, 2019 AND 2018

ASSETS

In CHF'000	Notes	31.12.2019	31.12.2018
Current assets			
Cash and cash equivalents		2 443	798
Accounts receivable from Group companies		81 940	74 044
Loan to third party		–	1 066
Other current receivables and prepaid expenses	3.1	816	1 040
Total current assets		**85 199**	**76 948**
Fixed assets			
Loans to Group companies		594 521	670 500
Loan to third party		1 038	–
Investments	3.2	364 256	371 362
Total fixed assets		**959 815**	**1 041 862**
Total assets		**1 045 014**	**1 118 810**

SHAREHOLDERS' EQUITY AND LIABILITIES

In CHF'000	Notes	31.12.2019	31.12.2018
Short-term liabilities			
Short-term interest-bearing liabilities :			
- Bank overdraft		–	3 644
- Bank, short-term borrowings		21 000	–
Other short-term liabilities :			
- due to third parties		205	817
- due to Group companies		24 925	47 880
Accrued expenses		1 922	2 255
Total short-term liabilities		**48 052**	**54 596**
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		**398 052**	**404 596**
Shareholders' equity			
Share capital		437 961	436 327
Legal reserves:			
- from retained earnings		110 000	110 000
- from capital contribution		74 216	79 689
Retained earnings		88 198	145 616
Net (loss) / income		-63 413	-57 418
Total shareholders' equity	**3.4**	**646 962**	**714 214**
Total liabilities and shareholders' equity		**1 045 014**	**1 118 810**

INCOME STATEMENTS AND PROPOSAL FOR APPROPRIATION OF AVAILABLE EARNINGS FOR THE YEAR 2019

INCOME STATEMENTS FOR THE YEARS ENDED DECEMBER 31, 2019 AND 2018

In CHF'000	Notes	2019	2018
Financial income	4.1	23 596	39 953
Gain on sale of investments		2 418	252
Administrative and other expenses		-3 128	-2 755
Financial expenses and exchange result	4.2	-14 800	-10 893
Impairment of financial fixed assets	4.3	-70 454	-82 779
Income/(loss) before tax		**-62 368**	**-56 222**
Direct taxes (other than income tax)		-1 045	-1 196
Net income/(loss)		**-63 413**	**-57 418**

PROPOSAL FOR APPROPRIATION OF AVAILABLE EARNINGS FOR THE YEAR 2019

In CHF'000	Legal reserves from capital contribu-tion	Retained earnings
Balance brought forward from previous year	79 689	88 197
Dividend	-5 473	–
Net result	–	-63 413
Total available earnings	**74 216**	**24 784**
Proposal of the Board of Directors:		
Ordinary distribution:		
- CHF 0.10 on 50'115'192* bearer shares (of which CHF 0.05 out of capital contribution reserve and CHF 0.05 out of retained earnings)	-2 506	-2 506
- 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)	-231	-231
Balance to be carried forward	**71 479**	**22 047**

* This figure represents the number of bearer shares which are dividend bearing as of December 31, 2019 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 2019

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 2019

3. NOTES TO THE BALANCE SHEETS

3.1 OTHER CURRENT RECEIVABLES AND PREPAID EXPENSES

In CHF'000	31.12.2019	31.12.2018
Prepaid expenses	730	958
Withholding tax	69	51
Other accounts receivable	17	31
	816	**1 040**

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 2019	2018
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	32 833	100	100
Nagra Media Germany GmbH	DE – Ismaning	Services	kEUR	25	100	100
Nagra USA, LLC	US – Phoenix	Services, sales and support	kUSD	10	100	100
SKIDATA AG	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	10 000	100	100
Nagra Media (Taiwan) Co., Ltd	TW - Taipei	Sales and support	kNTD	500	100	100
Kudelski Norway AS	NO - Oslo	Holding	kNOK	200	100	100
iWedia SA	CH - Lausanne	Solutions for Digital TV	kCHF	750	40	40
Kryptus Segurança da Informaçao Ltda.	BR - Sao Paulo	Cyber Security Solutions	kBRL	298	16	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	100	100
NexGuard Labs B.V.	NL - Eindhoven	Watermarking Solutions	kEUR	25	100	100
NexGuard Labs France SAS	FR - Cesson Sevigne	Watermarking Solutions	kEUR	420	100	100

SIGNIFICANT INDIRECT INVESTMENTS

Company	Location	Activity	Share capital		Percentage held and voting rights 2019	2018
Nagravision AS (form. Conax AS)	NO - Oslo	Solutions for Digital TV	kNOK	1 111	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
Sentry Control Systems LLC	US – Van Nuys	Public access	kUSD	45	M	60
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, 2017	**435 118**	**110 000**	**85 010**	**145 616**	**775 744**
Dividend	–	–	-5 452	–	-5 452
Share capital increase	1 209	–	131	–	1 340
Net Income	–	–	–	-57 418	-57 418
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**

NOTES TO THE FINANCIAL STATEMENTS 2019

SHARE CAPITAL

In CHF'000	31.12.2019	31.12.2018
50'115'192 / 49'910'873 bearer shares, at CHF 8 each	400 922	399 287
46'300'000 registered shares, at CHF 0.80 each	37 040	37 040
	437 962	**436 327**

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	2019	2018
Conditional share capital as of January 1	83 223	84 432
Increase of conditional share capital	4 000	–
Employee share purchase plan	-193	-214
Shares allotted to employees	-1 442	-995
Conditional share capital at December 31	**85 588**	**83 223**
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:		
698'564 / 402'833 bearer shares, at CHF 8 each	5 588	3 223
	85 588	**83 223**

AUTHORIZED SHARE CAPITAL (ARTICLE 7 OF ARTICLES OF INCORPORATION)

In CHF'000	31.12.2019	31.12.2018
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 March 15, 2020, for the purpose of acquiring companies or parts of companies.

MAJOR SHAREHOLDERS

	Voting rights		Shareholdings	
	31.12.2019	31.12.2018	31.12.2019	31.12.2018
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.

4. NOTES TO THE INCOME STATEMENTS

4.1 FINANCIAL INCOME

In CHF'000	2019	2018
Dividends received from Group subsidiaries	5 425	15 282
Interest on loans to Group subsidiaries	18 042	24 377
Interest income third parties	129	294
	23 596	**39 953**

4.2 FINANCIAL EXPENSES AND EXCHANGE RESULTS

In CHF'000	2019	2018
Net currency exchange result	-7 849	-3 808
Interest on loans from Group subsidiaries	-460	-257
Interest expenses and bank charges	-6 491	-6 828
	-14 800	**-10 893**

4.3 IMPAIRMENT OF FINANCIAL FIXED ASSETS

In CHF'000	2019	2018
Change in provision on Group investments and loans	-70 454	-82 778
Value adjustment on investments	–	-1
	-70 454	**-82 779**

The change in provision on Group investments relates to capital contributions (stabilization measures) of kCHF 59 631 (2018: kCHF 69 811), subsidiary substance dividend for kCHF 0 (2018: kCHF 12 966) and an impairment of kCHF 10 823 recognized for an entity that has transferred all its activities to another Group and is no longer active.

NOTES TO THE FINANCIAL STATEMENTS 2019

5. COMMITMENTS AND CONTINGENCIES

In CHF'000	31.12.2019	31.12.2018
Guarantee commitments		
Commitment in favor of third parties	786	828
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 2019 and 2018 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 2019

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 2019, income statements and notes for the year then ended, including a summary of significant accounting policies.

In our opinion, the financial statements (pages 64 to 71) as at 31 December 2019 comply with Swiss law and the company's articles of incorporation.

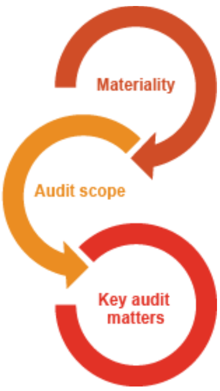
Basis for opinion

We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Our responsibilities under those provisions and standards are further described in the "Auditor's responsibilities for the audit of the financial statements" section of our report.

We are independent of the entity in accordance with the provisions of Swiss law and the requirements of the Swiss audit profession and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our audit approach

Overview



Overall materiality: CHF 10'000'000

We tailored the scope of our audit in order to perform sufficient work to enable us to provide an opinion on the financial statements as a whole, taking into account the structure of the entity, the accounting processes and controls, and the industry in which the entity operates.

As key audit matter the following area of focus has been identified:

Valuation of investments in subsidiaries and loans to Group companies

Materiality

The scope of our audit was influenced by our application of materiality. Our audit opinion aims to provide reasonable assurance that the financial statements are free from material misstatement. Misstatements may arise due to fraud or

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

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 364m and CHF 595m 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 682m Public Access (PA): CHF 179m Cybersecurity (CS): CHF 56m Internet of Things (IoT): CHF 42m We focused on these areas in view of the significance of the amounts involved, the business segments’ operating performance during 2019 and judgement involved by management about future results.	We obtained an understanding of management’s process and controls over the valuation of investments and loans to Group companies. We obtained the Group’s impairment analysis for all 4 CGUs and performed the following procedures: - Tested the mathematical accuracy of the model and traced amounts to underlying financial statement and other information, as applicable. - Assessed the quality of the cash flow projections by comparing the actual results to prior year budget to identify in retrospect whether any of the assumptions might have been too optimistic. - Reconciled the 5 year projections to the budget that was subject to scrutiny and approval by the Board of Directors and gained an understanding of the process undertaken to develop the projections. - We challenged management to substantiate its key assumptions in the cash flow projections during the forecast period and its intention and ability to execute their strategic initiatives.

The recoverable amount of the CGUs is determined by management based on value-in-use calculations, which depend on cash flow projects and judgement of growth rates. The outcome of the impairment test results in no need for impairment. The change in provision on Group investments and loans relates to a loan forgiveness of CHF 60m to a Group company and an impairment of CHF 11m recognized for an entity that has transferred all its activities to another Group company and is no longer active. Refer to note 2 – Accounting policies: Financial Assets and note 4.3 – Impairment of financial fixed assets	- We tested, with the support of our valuation specialists, the reasonableness of the cash flows growth rate after the forecast period. - Together with our specialists, we evaluated the reasonableness of the discount rate applied to those future cash flows. On the basis of the evidence obtained from our audit, we consider the valuation method and the assumptions used by the Group to be an appropriate and adequate basis 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 to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

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 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	Mario Berckmoes
Audit expert Auditor in charge	Audit expert

Lausanne, 26 February 2020

KUDELSKI SA

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