How we create value

The u-blox Annual Report 2018



Annual Report 2018

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Business Review 2018

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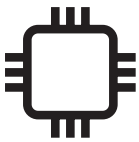
44 Information for investors

Financial highlights

Revenue in m CHF **393.3**	Operating profit (EBIT) in m CHF **48.3**	Net profit in m CHF **38.5**
Gross profit margin in % **45.0**	Adjusted operating profit (EBIT) in m CHF **60.4**	Adjusted net profit in m CHF **48.2**
Operating cash flow in m CHF **36.3**	Free cash flow in m CHF (before aquistions) **- 22.9**	Equity ratio in % **63.1**

Last year at u-blox

What we've been doing in 2018



Disruptive new products
Last year, we launched the latest generation of our positioning technology: the F9 platform. The F9 family of high-precision positioning devices bring dual-frequency, centimeter-level accuracy to the mass market for the first time. This is two orders of magnitude more accurate than standard GNSS – representing a significant and disruptive development. Combined with correction data services, these chips and modules are enabling exciting new applications to emerge in the industrial and automotive fields. Road safety is also set to receive a major boost, following the launch of our UBX-P3 vehicle-to-everything (V2X) chips. The UBX-P3 will give tomorrow's cars the ability to 'see' each other electronically, even when there's no visual line of sight. This will enable proactive warnings to drivers and, in the future, trigger autonomous vehicle actions that protect road users. To bring our V2X chips to market, we entered into several partnership with leading players in the industry.



High-added-value services
We continue to invest in services that add significant value for our customers and open up exciting new markets and opportunities. Our Sapcorda joint venture is on track to deliver a global commercial correction data service, while our alliance with digital security specialist Kudelski Group will provide premium-grade, Swiss-built security for customers deploying IoT networks.



Proactive IP management
As part of our commitment to adhering to the highest intellectual property management practices and protecting our customers, we continue to establish Intellectual Property (IP) royalty agreements with licensors for standard essential patents. This gives our clients the confidence that they can use our products without infringing third-party IP rights. The latest example is an agreement with Philips, covering our 2G, 3G, and 4G cellular products.



Award-winning research
Our R&D collaboration with the University of Bristol (UK) on "Reconfigurable Wireless Transceivers for Global Connectivity" saw us crowned winners of the Research Collaboration category at the TechWorks Awards 2018 – the highest accolade in the UK deep tech industry.



Broadened customer base
We have continued our strategy of growing and diversifying our customer base. In 2018, we served over 6000 clients across 54 countries. Furthermore, our 10 largest customer accounts cover just 27% of our sales.



u-blox goes to space
GNSS has become an indispensable tool in space missions. Earth observation missions, for example, depend on accurate information of the satellite's position when data is sensed remotely. Accurate timing information is equally important. Four u-blox NEO-M8T GNSS modules, loaded with experimental firmware, were launched into space on a SpaceX Falcon 9 rocket as part of the Spaceflight SSO-A: SmallSat Express mission. They are now orbiting Earth on an Astrocast nano-satellite.

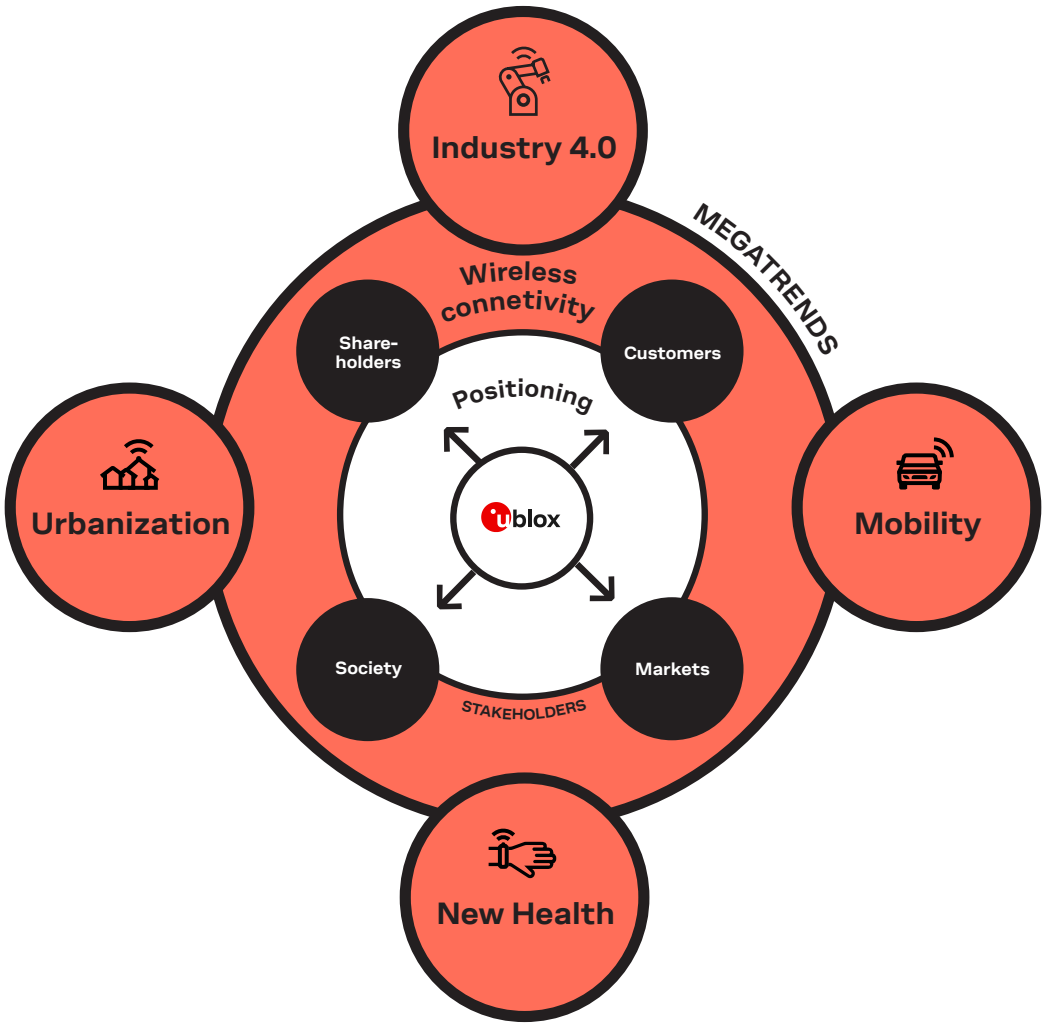
How we create value

Creating value the u-blox way

We deliver leading wireless technology to reliably locate and connect billions of people and devices, creating value for all our stakeholders.

At u-blox, our central **mission** is to add value for customers, employees, shareholders, and the environment. Our long-term and holistic approach to value creation centers on financial and non-financial aspects of our business.

To **future-proof** our growth strategy, we have aligned our activities with four core megatrends: Mobility, Industry 4.0, Urbanization, and New Health.



What we do to create value

We develop innovative, reliable positioning and wireless communication solutions that securely connect vehicles, industries, things, and millions of people around the world.

We leverage our expertise in radio and signal processing technology to meet global megatrend driven demand for cloud connectivity – enabling smarter cities, mobility, and health care.

We encourage employees to excel at innovation benefiting product development, operational excellence, and quality.

Drivers of value creation

1. Strong history

- 20+ years experience in positioning and wireless
- 6900+ customer base across diverse applications and markets
- Strong market position, leading in GNSS and highly competitive in cellular and short range technology
- Solid reputation earned through long-term relationships with global customers
- Deep market and technology competence garnered through consistent expansion of capabilities

2. Clever investment

- Continued strong investment into R&D underpinning our leadership position in the market
- Strategic investments into new product domains fostering our growth
- Financial strengths and capacity to invest and acquire technologies to enrich our portfolio
- In-house semiconductor design and test development yielding an important part of value creation

3. Smart people

- Broad international talent base of 1000+ employees
- Strong R&D focus with engineers making up 68% of our staff
- Founders based executive committee keeps the company on a solid course
- Thought leadership in a diversity of verticals, markets, and geographical regions
- Globally present sales and support organization, providing access to all key markets
- Engagement in the community to better understand how to address societal needs

4. Unmatched Intellectual Property

- Innovation spirit and pragmatic attitude delivering rich intellectual property in wireless communication technology
- Strong process thinking and agility ensuring robust industrialization
- Proactive stance towards IPR winning us fair terms for standard essential patents

5. Leading products

- Future oriented product portfolio enabling digitalization across markets and sectors
- Broad solution portfolio for creating connected devices in all types of industries
- Highly reliable wireless connectivity chips and modules for the industrial Internet of Things
- Unique product line-up including chipsets, modules, and services

6. Long-term partnerships

- Curated supply chain with redundancies for high supply reliability
- Industry-leading manufacturers are our partners for highest quality chips and modules
- Strong relationships with customers delivering deep insight into diverse applications
- Industry ecosystem partners to build strong platforms that our customers can leverage

Impacts to our stakeholders

Customers

- Delivering responsible, innovative, and appropriate technologies
- Enabling customer competitiveness and growth
- Highest quality through extensive quality testing, at the fab and in-house
- Reduced design-in complexity thanks to robust software interfaces, full suite of evaluation boards, development tools, and support
- Long term commitment including long product life-cycles and transparent product change notifications

Society

- Powering the economy through over 1000+ highly specialized staff members with highly payed jobs and important tax income to their communities
- Career growth of employee base in well established sites world-wide
- Employee engagement in community projects
- Community investments including product donations, funding, and volunteering
- Ethical and environmentally friendly sourcing and manufacturing
- Driving the “smart society” by providing essential technologies
- Providing millions access to new and smarter digital devices and services

Markets

- Fostering ecosystem growth and interoperability
- Corporate venturing to promote promising technologies
- Pushing the envelope on the development of mass-market compatible communication technology solutions

Shareholders

- Financial stability underpins our position as a preferred employer and dependable supplier
- Financial growth with a market capitalization attaining CHF 600 million, strong tax contribution, increased employment potential for highly qualified jobs



Letter to the shareholders

Dear Shareholders,

We are a company built on innovation.

Innovation has driven our growth in the 21 years since we founded the business. Innovation has made us a leading technology company in satellite-based positioning receivers and wireless communication.

Innovation – which distinguishes leaders from followers – is a long-term business, and the adoption of new technology seldom happens in the blink of an eye. For example, our wireless chips and modules in the industrial and automotive markets have a 5-10 year product life-cycle. At u-blox, we invest in innovation for the long term, as we did in 2018 with over CHF 100 million.

This longer-term view of our business and target markets gives us the confidence that we will see a return to growth in all regions in 2019 and, in the longer term, substantial returns on our investment in research and development. Market conditions were not favorable for our business in 2018 and this certainly impacted our business. In the Americas, revenues declined slightly due to initial slow migration to LTE. However, we are already now seeing this trend reverse. In the Asian markets we were negatively impacted by the US-China trade tensions and some application sectors shrinking. Nevertheless, we grew our business in the infrastructure, in-car navigation, and after market car electronics sectors. On the positive side, EMEA has grown an impressive 21% in 2018 and we expect that strong trend to continue.

Customers continued to endorse our long term, innovation-oriented vision in 2018. Some prominent examples include: Leica Geosystems chose our products to provide reliable cable-free instrumentation for its geodetic devices used in construction environments; Xirgo Technologies, a leading provider of tracking solutions, is embedding global 3G module and GNSS chips from u-blox in its products; HMS chose u-blox to enable industrial machines and device communication; and Bosch announced it would use our technology at the core of its new vehicle motion and positioning sensor (VMPS) – one of the first GNSS inertial positioning systems for highly automated driving.

Four pillars of our strategy

To always better serve our customers the four pillars of our strategy are: 1) focus on the key markets essential for growth, 2) create market leading technology and innovation to lead in those markets, 3) achieve operational excellence, and 4) create partnerships and pursue acquisitions. We are pleased to say we have achieved substantial progress in all four areas in 2018.

- **Market position**: focusing on the markets with the greatest long-term growth potential.

Autonomous driving, mobility, and unmanned vehicles need robust, reliable, and safe connectivity and positioning technologies. We have developed a comprehensive offering to service the enormous growth potential of autonomous vehicles, and entered into several partnership with leading players in this industry. New



product launches this year have strengthened our position in this space. Both the UBX-P3 V2X communication and the F9 high-precision positioning chips and modules were very well received by customers. The F9 platform is compatible with correctional data services, such as the service we are bringing to market with Bosch, Geo++, and Mitsubishi Electric through the Sapcorda joint venture. All of this combines to give customers a one-stop shop for their accurate and robust location-awareness and connectivity solutions, which are critical to semi- and fully autonomous vehicles.

In parallel with this push for greater vehicle autonomy, government clean-air initiatives are accelerating the development of electric vehicles (EVs). This specific market sector includes many new automakers who are looking to innovate fast and insource key elements of the design process, including on-board electronics.

u-blox is perfectly positioned to partner with these EV manufacturers, providing the products, services, and engineering support to help them execute their rapid design cycles. We have already achieved significant traction in this highly attractive market.

Industrial markets are also a key focus, where the need for communication and positioning technologies continues to grow. The high-precision localization offered by the F9 modules is as important in this market as it is in automotive. On the communications side, our newly

“Industrial markets are also a key focus, where the need for communication and positioning technologies continues to grow.”

99%

of orders reached our customers on the confirmed delivery date.

launched SARA-R412, the smallest multi-mode LTE-M and NB-IoT device on the market, enables robust and low-power long-range links between the growing number of remote, mobile assets world-wide.

- **Technology and innovation:** expanding our products and services portfolio while taking greater control.

Our strategy to increase the number of products using our own silicon continues to bear fruit. The UBX-P3 is the industry's smallest and most versatile V2X communication chip for active safety and autonomous driving technologies and is the latest addition to this growing family of chipsets, which now covers our three main product areas of positioning, cellular, and short-range communication.

The strategic drive to use our own silicon means we have greater control over our supply chain and enables the offering of targeted value-added features, notably security.

We also continue to invest in combination products that help our customers get their own solutions to market more quickly. Evaluation kits bring together short-range and high-precision positioning capabilities, enabling faster, integrated, and more straightforward prototyping.

Strong investments were also made for expanding production technology with extended test capabilities and facilities, and lots of efforts went into miniaturization of our products.

- **Operational excellence:** We continue to drive efficiencies in everything we do.

We are close to the100-million-units-shipped-per-year mark, therefore maintaining high levels of efficiency and resilience across our business is a key strategic focus. This means increasing our supply chain robustness to reduce risk and costs, and ensuring that we maintain and improve our logistical performance. This work is paying dividends. In 2017, an impressive 98% of orders reached our customers on the confirmed delivery date. In 2018, we achieved 99%, further reinforcing our reputation as a truly dependable partner for our clients.

- **Strategic partnerships and acquisitions:** We accelerate our growth through acquisitions and alliances.

We continue to scan the market for the right opportunities to acquire other businesses or partner with specialists who add real value to u-blox. In 2018 we further invested in the Sapcorda joint venture with Bosch, Geo++, and Mitsubishi Electric, to prepare our commercial correction data service for market. In addition, our newly announced alliance with Kudelski Group to provide premium-grade security for the IoT is another example of a strategic partnership that adds real value for our customers.

2018 financial highlights

In 2018 our revenues were broadly in line with our latest guidance at CHF 393.3 million, with EBIT of CHF 48.3 million, and EBITDA of CHF

71.6 million. We saw growth in all countries we operate in throughout Europe, the Middle East and Africa (EMEA), and throughout the Asia Pacific region, except China.

In EMEA business was very strong in 2018, with 21% revenue growth. This was driven by the need for connected devices destined for the Internet of Things (IoT) in infrastructure and telematics, as well as an increasing demand from the automotive sector, stimulated by the need for in vehicle connectivity.

Revenues in the Americas declined slightly by 6% as some customers were delaying the migration to LTE based connectivity due to changing specifications and due to carriers not equipping their infrastructure in a timely manner. However, in the last quarter we saw a good increase of sales in LTE M and NB IoT modems and we expect this trend to continue. Although tracking applications declined, other industrial markets continue to grow strongly and the automotive sector maintains attractive growth, thus giving us confidence for overall revenue growth in 2019.

We saw a short term decline in revenue in APAC (13%), largely due to market regulation influencing some consumer applications in China and the impact of the China US trade tensions. While these factors impacted the first half of the year sales, business rebounded in the second half with growth in the infrastructure, in car navigation, and after market car electronics sectors. Looking into 2019, we see several indications of renewed growth in the APAC region, namely: 1) strong technology momentum in China, boosted by increased investment in technology, 2) increased demand for consumer applications, and 3) growth in industrial IoT, with China accounting for about one quarter of the IoT market globally, and Japan, Korea, and Taiwan already showing increasing demand for industrial IOT and automotive solutions.

Future outlook

We are convinced that the Internet of Things will change every aspect of our societies, our businesses, and our everyday lives.

A quarter of a billion connected cars will be delivered between 2019 – 2023. Industry 4.0 is happening and it is expected that there will be more than 2 billion connected devices in 2023.[1] Infrastructure is becoming smarter. There will be approximately 1 billion smart meters installed between 2019 – 2023.[2] Over half a billion sports and wellness trackers will be sold in the next 5 years (2019 – 2023).[3]

“A quarter of a billion connected cars will be delivered between 2019 – 2023.”

These strong market growth drivers substantiate our strategy to develop reliable and innovative positioning and wireless communication solutions that securely connect vehicles, industries, things, and millions of people around the world.

To do so, we continue to invest in innovation. In 2018 we invested over CHF 100 million in R&D, with 703 engineers in 14 research and development centers globally. Currently 6 new chip platforms are in the development pipeline to drive profitable business growth.

More technological capabilities open new application possibilities and innovation at our IP core will assure continued margin expansion. Our targeted investments in future technologies ensure growth and certainty.

[1] BI Intelligence 2018
[2] ABI research 2018
[3] TSR 2018

New standards will expand application possibilities. For example, 5G defines higher performance requirements. Bluetooth and Wi Fi standards expansion will allow the capillary Industry Internet of Things, bridging the cellular and short range radio worlds. New GNSS satellite signals will offer higher availability and precision.

Our product initiatives are at the forefront of these important industrial megatrends. We continue to convince leading customers with our technology and innovation leadership, and our technology platform provides the basis to deliver resilient value added services. Further, our product diversification by applications and geography assure stability in growth.
We are confident our innovation will deliver results. Revenue target for 2019 is CHF 460 to 490 million, with an EBITDA of CHF 70 to 90 million and EBIT of CHF 30 to 45 million.

Board of Directors
2019 will see some changes in the Board of Directors. Prof. Dr. Gerhard Tröster and Dr. Paul Van Iseghem will retire and therefore not stand for re election at the upcoming Annual General Assembly on April 25, 2019. Both have been instrumental over many years in the development of the company: Prof. Dr. Gerhard Tröster as founding professor since u blox was spun off from the ETH, and Dr. Paul van Iseghem as Vice Chairman since 2011.

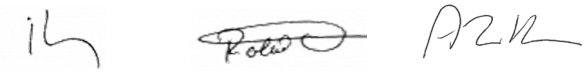
The board will propose the election of the following candidates as non executive director on the Board of Directors of u blox Holding AG: Dr. Annette Rinck and Markus Borchert.
As previously announced, Daniel Ammann, member of the Executive Committee and responsible for the Positioning and Short Range Radio product centers, will leave u blox at the end of March 2019 and the Executive Committee was reorganized to combine all product centers in one group, which will be headed by Andreas Thiel. Mr. Thiel is member of the Executive Committee, as well as being a co founder of u blox, and is currently responsible for the Cellular product center and the center for integrated circuits.

Finally, a word of thanks
On behalf of the Board of Directors and Executive Committee, we would like to take this opportunity to thank all our employees. Your talent and commitment are what make u-blox the successful company we are today. We would also like to extend our thanks to you, our shareholders, for your continuing trust and confidence in u-blox.

Lastly, we would like to thank all our customers, suppliers and manufacturing partners.

Together, we will make 2019 a new year of growth and innovation!

Yours faithfully,



Thomas Seiler	Roland Jud	Andre Müller
CEO	CFO	Chairman

Financial summary



Financial summary

Financial highlights (adjusted)

(CHF in million)	2018	2017	2016
Revenue	**393.3**	**403.7**	**360.2**
Growth rate over previous year	-2.6%	12.1%	6.5%
Gross Profit adjusted[2)]	**177.9**	**184.8**	**167.8**
Growth rate over previous year	-3.7%	10.1%	7.9%
Gross Profit adjusted[2)] in % of revenue	45.2%	45.8%	46.6%
EBITDA[1)] adjusted[2)]	**81.2**	**97.8**	**90.0**
Growth rate over previous year	-16.9%	8.7%	6.5%
EBITDA adjusted in % of revenue	20.7%	24.2%	25.0%
Operating profit (EBIT) adjusted[2)]	**60.4**	**78.0**	**69.8**
Growth rate over previous year	-22.6%	11.8%	16.5%
Operating profit (EBIT) adjusted[2)] in % of revenue	15.4%	19.3%	19.4%
Net Profit adjusted[2)]	**48.2**	**61.5**	**54.3**
Growth rate over previous year	-21.7%	13.3%	23.8%
Net Profit adjusted[2)] in % of revenue	12.2%	15.2%	15.1%
Cash generated from operating activities	**36.3**	**60.5**	**93.6**
Growth rate over previous year	-39.9%	-35.3%	25.3%
in % of revenue	9.2%	15.0%	26.0%
Equity	**348.9**	**318.5**	**284.7**
in % of total assets	63.1%	60.7%	67.0%
Dividend per share[3)]	1.60	2.25	2.10

[1)] EBITDA (earnings before interest, taxes, depreciation and amortization) calculated by adding depreciation and amortization to profit from operations (EBIT), in each case determined in accordance with IFRS.
[2)] excl. share based payments, impacts based on IAS-19, amortization of intangible assets acquired and non-recurring expenses.
[3)] proposal of the Board of Directors to the AGM

Financial highlights (IFRS)

(CHF in million)	2018	2017	2016
Revenue	**393.3**	**403.7**	**360.2**
Growth rate over previous year	-2.6%	12.1%	6.5%
Gross Profit	**177.1**	**184.0**	**167.1**
Growth rate over previous year	-3.7%	10.1%	7.8%
Gross Profit in % of revenue	45.0%	45.6%	46.4%
EBITDA[1)]	**71.6**	**87.4**	**81.8**
Growth rate over previous year	-18.0%	6.9%	3.9%
EBITDA in % of revenue	18.2%	21.6%	22.7%
Operating profit (EBIT)	**48.3**	**65.1**	**59.0**
Growth rate over previous year	-25.8%	10.3%	15.0%
Operating profit (EBIT) in % of revenue	12.3%	16.1%	16.4%
Net Profit	**38.5**	**51.3**	**46.2**
Growth rate over previous year	-24.9%	11.0%	24.5%
Net Profit in % of revenue	9.8%	12.7%	12.8%
Cash generated from operating activities	**36.3**	**60.5**	**93.6**
Growth rate over previous year	-39.9%	-35.3%	25.3%
in % of revenue	9.2%	15.0%	26.0%
Equity	**348.9**	**318.5**	**284.7**
in % of total assets	63.1%	60.7%	67.0%
Dividend per share[2)]	1.60	2.25	2.10

[1)] EBITDA (earnings before interest, taxes, depreciation and amortization) calculated by adding depreciation and amortization to profit from operations (EBIT), in each case determined in accordance with IFRS.
[2)] proposal of the Board of Directors to the AGM

Revenue breakdown

u-blox operates in two segments:

Positioning and wireless products

u-blox develops and sells chips and modules for positioning and wireless connectivity that are used in automotive, industrial and consumer applications. Revenue was CHF 393.3 million for 2018 as compared to CHF 403.5 million in 2017.

Wireless services

u-blox also offers wireless communication technology services in terms of reference designs and software. In 2018, revenue for wireless services was CHF 31.5 million compared to CHF 32.8 million in 2017 (including intra group revenue).

Consolidated income statement (IFRS and adjusted)

	Jan - Dec 2018			Jan - Dec 2018		Jan - Dec 2017	
(in CHF 000s)	**(IFRS)**	% revenue	Adjustments[2]	(adjusted)	% revenue	(adjusted)	% revenue
Revenue	**393'269**	100.0%		**393'269**	100.0%	**403'712**	100.0%
Cost of sales	-216'151	-55.0%	809	-215'342	-54.8%	-218'901	-54.2%
Gross Profit	**177'118**	45.0%	**809**	**177'927**	45.2%	**184'811**	45.8%
Distribution and marketing expenses	-36'966	-9.4%	2'184	-34'782	-8.8%	-34'049	-8.4%
Research and development expenses	-74'925	-19.1%	7'107	-67'818	-17.2%	-58'345	-14.5%
General and administrative expenses	-20'755	-5.3%	2'011	-18'744	-4.8%	-16'295	-4.0%
Other income	3'818	1.0%		3'818	1.0%	1'921	0.5%
Operating Profit (EBIT)	**48'290**	12.3%	**12'111**	**60'401**	15.4%	**78'043**	19.3%
Finance income	5'305	1.3%		5'305	1.3%	5'668	1.4%
Finance costs	-2'158	-0.5%		-2'158	-0.5%	-5'652	-1.4%
Share of profit of equity-accounted investees, net of taxes	-3'339	-0.8%		-3'339	-0.8%	-400	-0.1%
Profit before income tax (EBT)	**48'098**	12.2%	12'111	**60'209**	15.3%	**77'659**	19.2%
Income tax expense	-9'617	-2.4%	-2'422	-12'039	-3.1%	-16'134	-4.0%
Net profit, attributable to owners of the parent	**38'481**	9.8%	**9'689**	**48'170**	12.2%	**61'525**	15.2%
Earnings per share in CHF	5.58			6.99		8.91	
Diluted earnings per share in CHF	5.56			6.96		8.81	
Operating Profit (EBIT)	48'290	12.3%	12'111	60'401	15.4%	78'043	19.3%
Depreciation and amortization	23'356	5.9%	-2'512	20'844	5.3%	19'780	4.9%
EBITDA[1]	**71'646**	18.2%	**9'599**	**81'245**	20.7%	**97'823**	24.2%

[1] Management calculates EBITDA (earnings before interest, taxes, depreciation and amortization) by adding back depreciation and amortization to operating profit (EBIT), in each case determined in accordance with IFRS.
[2] Adjustments are impacts of Share based payments, Pension calculation according to IAS-19, Non-recurring expenses and amortization of intangible assets acquired

Geographic breakdown of 2018 revenues were 35.4%, 32.4% and 32.2% for Asia Pacific, EMEA and Americas, respectively. u-blox was able to grow revenues in EMEA by 20.5% to CHF 126.2 million. In APAC revenue decreased by 13.3% to CHF 139.1 million and in the Americas revenue declined by 6.3% to CHF 126.6 million.

In 2018, the company generated about 80% of its total revenue from 104 customers. u-blox's largest customer accounted for less than 4% of revenue and u-blox served over 6'900 customers achieving global expansion into new regions and markets.

Gross profit

Gross profit (adjusted) decreased by 3.7% to CHF 177.9 million in 2018 from CHF 184.8 million in 2017. Adjusted gross profit margin was 45.2% for 2018 compared to 45.8% in 2018 due to changes in product mix.

Distribution and marketing activities

Distribution and marketing expenses (adjusted) remain stable in 2018 with CHF 34.8 million as compared to CHF 34.0 million in the previous year. As a percentage of revenue, distribution and marketing expenses (adjusted) were 8.8% in 2018 compared to 8.4% in 2017.

Research and product development
R&D expenses (adjusted) in 2018 were CHF 67.8 million as compared to CHF 58.3 million in 2017. As a percentage of revenue, R&D expenses (adjusted) in 2018 were 17.2% as compared to 14.5% in 2017. The percentage of revenue increased due to both expanded R&D activity. Including capitalized efforts, we have again invested considerable amounts into R&D to add new platforms to our product offering.

Share based payment
Share based payment expenses recognized according to IFRS in 2018 were CHF 8.4 million as compared to CHF 8.1 million in 2017.

Operating profit (EBIT)
Operating profit (EBIT) (adjusted) was CHF 60.4 million in 2018 as compared to CHF 78.0 million in the previous year. Operating profit (EBIT) (adjusted) declined from 2017 to 2018 by 22.6%. Operating profit (EBIT) margin (adjusted) decreased to 15.4% and EBITDA margin (adjusted) was 20.7% in 2018.

Finance income and costs
Finance income was CHF 5.3 million mainly generated by foreign exchange effects. Finance costs were CHF 2.2 million consisting mainly of interest payments for the two outstanding bonds. The share of profit of equity-accounted investee Sapcorda GmbH was CHF -3.3 million net of tax.

Net cash generated from operating activities
In 2018, u blox generated cash from operating activities in the amount of CHF 36.3 million as compared to CHF 60.5 million in 2017, a decline of 39.9% compared to previous year, due to an increase of net working capital due to higher inventories. Excluding this working capital effect, u-blox generated cash from operating activities of CHF 68.6 million.

Main investing activities
Investments in property, plant and equipment, and intangible assets amounted to CHF 61.4 million in 2018 (2017: CHF 65.1 million). As a percentage of sales, the investment ratio decreased slightly to 15.6% in 2018 (2017: 16.1%). Despite the continued expansion of the R&D pipeline and the increased number of development projects across all product categories, capitalized development costs were stable at CHF 53.8 million (2017: CHF 53.8 million). There were no investments into intellectual property rights in 2018 (2017: CHF 0.2 million). Investments into software amounted to CHF 0.3 million (2017: CHF 0.5 million). In 2018, investments into property, plant and equipment reached CHF 7.3 million (2017: CHF 10.6 million).
u blox invested 87.6% of total investments (2017: 82.9%) into the development of new products. No investment went into capacity expansion in 2018 (2017: 2.0%).

Financing activities
In 2018 u blox paid dividends of CHF 15.4 million and received proceeds from the issuance of ordinary shares related to the employee share option plan of CHF 15.3 million. In the context of the employee share option program, u-blox invested CHF 7.6 million for the purchase of 53‘000 treasury shares (2017: CHF 24.4 million) to be used in the future for the employee option program.

Solid financial position
u-blox has a strong balance sheet with an equity ratio of 63.1%. Cash and cash equivalents and marketable securities amounted to CHF 137.7 million on December 31, 2018, compared to CHF 172.4 million on December 31, 2017.

Goodwill decreased due to changes in EUR/CHF exchange rate from CHF 57.6 million in 2017 to CHF 55.2 million or 9.9% of total assets in 2018.

On the basis of this strong financial position and the positive outlook, the Board of Directors is proposing at the Annual General Meeting to pay out dividends. For this year a dividend of CHF 1.60 per share is proposed, which represents a payout ratio of 29.5% of consolidated net profit, attributable to owners of the parent in line with previous years’ payout ratios.

Financial summary

Consolidated statement of financial position

(in CHF 000s)	At December 31, 2018 (audited)	At December 31, 2017 (audited)
Assets		
Current assets		
Cash and cash equivalents	136'296	169'624
Marketable securities	1'401	2'813
Trade accounts receivables	60'802	50'401
Other current assets	78'415	60'476
Total current assets	**276'914**	**283'314**
Non-current assets		
Property, plant and equipment	14'829	17'494
Goodwill	55'231	57'628
Intangible assets	193'445	153'986
Financial assets (incl. equity accounted investees)	9'041	8'351
Deferred tax assets	3'570	3'739
Total non-current assets	**276'116**	**241'198**
Total assets	**553'030**	**524'512**
Liabilities and equity		
Current liabilities	55'476	58'946
Non-current liabilities	148'677	147'054
Total liabilities	**204'153**	**206'000**
Shareholders' equity		
Share capital	6'390	6'261
Share premium	66'296	66'579
Retained earnings (incl. treasury shares)	276'191	245'672
Total equity, attributable to owners of the parent	**348'877**	**318'512**
Total liabilities and equity	**553'030**	**524'512**

Consolidated cash flow statement

(in CHF 000s)	For the period ended December 31, 2018	For the period ended December 31, 2017
Net Profit	38'481	51'260
Depreciation & amortization	23'356	22'290
Other non-cash transactions	9'814	12'538
Financial income & financial expense	192	384
Income tax expense	9'617	13'442
Change in networking capital and provision	-32'235	-19'977
Income tax paid	-12'883	-19'433
Net cash generated from operating activities	**36'342**	**60'504**
Net investment into property, plant and equipment	-7'312	-10'548
Net investment into intangibles	-54'075	-54'371
Net investements into financial assets	2'103	4'968
Participation in capital increase	-4'107	-3'560
Net cash used in investing activities	**-63'391**	**-63'511**
Free Cash Flow (before participation in capital increase)	*-22'942*	*553*
Free Cash Flow	*-27'049*	*-3'007*
Proceeeds from issuance of ordinary shares	15'286	6'827
Dividens paid to owners of the parent	-15'441	-14'526
Net proceeds from borrowings	0	59'284
Purchase of treasury shares	-7'609	-24'422
Interest paid	-1'917	-1'151
Net cash provided by / used in financing activities	**-9'681**	**26'012**
Net increase in cash and cash equivalents	**-36'730**	**23'005**
Cash and cash equivalents at beginning of year	169'624	149'545
Exchange gains/(losses) on cash and cash equivalents	3'402	-2'926
Cash and cash equivalents at end of the period	**136'296**	**169'624**

Strategy



New products and services based on connectivity and location-awareness continue to transform the world around us. We provide the essential building blocks that bring this to life, underpinned by our four-pillar strategy.

Technology continues to develop at a rapid pace, revolutionizing the way we live, work, and play. Underpinning many of the new innovations are two key capabilities: connectivity and location-awareness. And this is exactly where we're continuing to focus our products and services, providing the foundations for tomorrow's connected world, which will touch virtually every part of our lives.

A closer look at our four-pillar strategy



Operational excellence

Continuing to drive efficiencies in everything we do.

We are close to the 100-million-units-shipped-per-year mark, therefore maintaining high levels of efficiency and resilience across our business is a key strategic focus. This means increasing our supply chain robustness to reduce risk and costs, and ensuring we maintain and improve our logistical performance. This work is paying dividends. In 2017, an impressive 98% of orders reached our customers on the confirmed delivery date. In 2018, we achieved 99%, despite critical component situation on the world market, further reinforcing our reputation as a truly dependable partner for our clients.



Strategic partnerships and acquisitions

Accelerating our growth through mergers and alliances.

We continue to survey the market for the right opportunities to acquire other businesses or partner with specialists who add real value to u-blox. In 2018 we further invested in the Sapcorda joint venture with Bosch, Geo++, and Mitsubishi Electric to prepare our commercial correction data service for market. In addition, our newly announced alliance with Kudelski Group to provide premium-grade security for the IoT is another example of a strategic partnership that adds real value for our customers.



Market position

Focusing on the markets with the greatest long-term growth potential.

Automotive remains an important market for us, and we've developed a comprehensive offering to service the enormous growth area that is autonomous vehicles. New product launches this year have strengthened our position in this space. Both the UBX-P3 V2X communication chips and F9 high-precision positioning modules were very well received by customers. The F9 platform is compatible with correctional data services, such as the one service we are bringing to market with Bosch, Geo++, and Mitsubishi Electric through the Sapcorda joint venture. All of this combines to give customers a one-stop shop for their accurate and robust location-awareness and connectivity solutions, which are critical to semi- and fully autonomous vehicles.

Industrial markets are also a key focus, where the need for communication and positioning technologies continues to grow. The high-precision localization offered by the F9 modules is as important in this market as it is in automotive. On the communications side, our newly launched SARA-R412, a truly globally certified multi-mode LTE-M/NB-IoT device, is the smallest on the market, enabling robust and low-power long-range links between the growing numbers of remote, moving assets in the world.



Technology and innovation

Expanding our products and services portfolio while taking greater control.

Our strategy to increase the number of products using our own silicon continues to bear fruit. The UBX-P3 is the latest addition to this growing family of chipsets, which now covers our three main product areas of positioning, cellular, and short-range communication.

The strategic drive to use our own silicon means we have greater control over our supply chain and enables us to offer targeted value-added features, notably security.

We also continue to invest in combination products that help our customers get their own solutions to market more quickly. Evaluation kits, such as the C099 launched in 2018, bring together short-range communication and high-precision positioning capabilities, enabling faster, integrated, and more straightforward prototyping.

Strong investments were also made for expanding production technology with extended test capabilities and facilities, and lots of efforts went into the miniaturization of our products.

Innovation

The technology world continues to evolve quickly. Our relentless focus on innovation helps ensure that we remain at the forefront, with an attractive, market-leading portfolio of products and services.

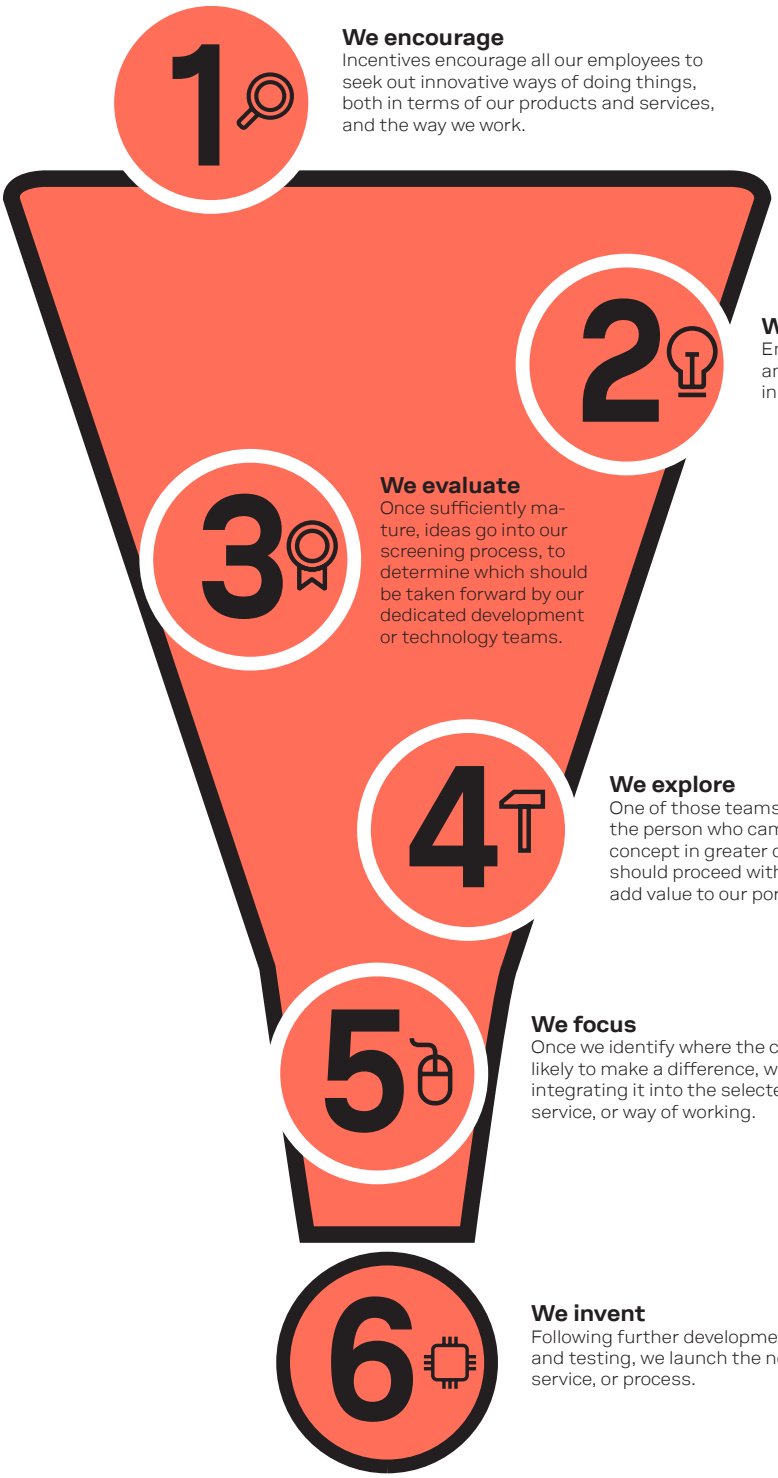
Innovation at u-blox is about expanding our competitive advantage by finding ways to further differentiate our products and services – meaning we can ultimately deliver more value to our customers. It continues to sit right at the core of our business, receiving substantial funding. This year, we again grew our R&D budget, spending more than CHF 100 million on this area.

We've expanded our global team of engineers working in our 15 dedicated R&D centers. Furthermore, we continue partnering with world class organizations such as universities and research institutions on R&D projects related to our product portfolio. This strategy continues to bear fruit, with highlights this year including the TechWorks Research Collaboration Award for our reconfigurable wireless transceiver work with the University of Bristol (UK) and, as part of our development of new technologies for the CellLocate positioning service, we have been supporting research at the University of Udine, Italy. The latter has resulted in a doctoral thesis on "Methods, techniques and algorithms for the management of cellular fingerprints in positioning systems," together with a number of scientific papers.

Innovation process
Six steps to inventions

Our innovation process

Our innovation process is set up to draw on the collective expertise of our workforce and ensure that we consider a broad range of ideas that could ultimately add real value for our customers and shareholders.



We encourage
Incentives encourage all our employees to seek out innovative ways of doing things, both in terms of our products and services, and the way we work.

We inspire
Employees are encouraged to develop and document their new ideas, with input from their managers.

We evaluate
Once sufficiently mature, ideas go into our screening process, to determine which should be taken forward by our dedicated development or technology teams.

We explore
One of those teams – potentially with the help of the person who came up with the idea – explores the concept in greater depth. We assess whether we should proceed with it and establish where it could add value to our portfolio or the way we operate.

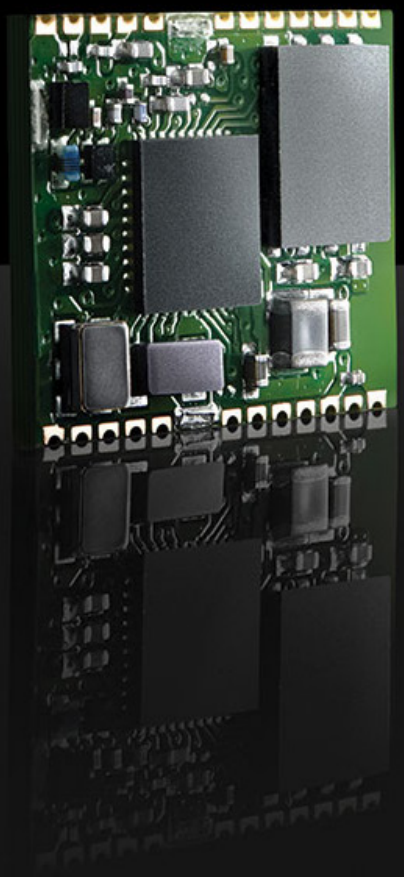
We focus
Once we identify where the concept is likely to make a difference, we focus in on integrating it into the selected product, service, or way of working.

We invent
Following further development, prototyping and testing, we launch the new product, service, or process.

Products and services

Keeping a step ahead of the market

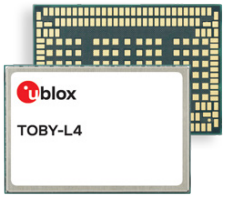
Our products and services – the fruits of our relentless focus on innovation – are fueling the ongoing digital revolution across our key markets.

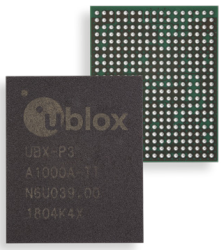


Drivers

Our product and service development is guided by tangible market trends, input from our customers, and our own forecasts of our target sectors' medium- and longer-term needs. Millions of people use connected wearables, cities are getting smarter, and cars are becoming safer and more automated. Our track record in anticipating market trends and successfully developing innovative products and services focused on our customers' evolving needs is noteworthy.

Achievements in 2018





Cellular products

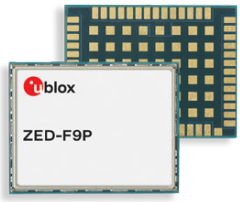
We have significantly expanded our cellular module offering, and today we provide one of the broadest offerings in the industry. In addition to modules for the still substantial business for legacy 2G and 3G standards, our product portfolio comprises solutions for all relevant LTE standards and their categories: NB-IoT, LTE-M, LTE Cat M1, and higher, including many models with fall-back capability to the legacy standards.

Meanwhile, our TOBY-L4 LTE Cat 6 module with its powerful open CPU for the automotive sector, launched in 2017, has been extremely popular with automotive OEMs, particularly in the electric vehicle (EV) space. We had numerous design wins during 2018 using the TOBY-L4, and the first cars incorporating this chip started production and are on the roads.

Following successful trials in 2017, we commenced the rollout of our Firmware Over The Air (FOTA) service. Less than a year after its launch, it is already deployed in the field on more than a million of our cellular modules.

Short-range communication products

The main highlight in short-range communication in 2018 has been the launch of our UBX-P3 vehicle-to-everything (V2X) chip. It expands the portfolio of products built on our own silicon and meets broad and fast-growing demand in the automotive market. In addition to being an important component of fully autonomous driving, V2X is taking on an ever-greater role in traditional and semi-autonomous vehicles, thereby increasing road safety. The UBX-P3 takes our commitment to shaping the future of active road safety and autonomous driving technologies to the next level.



Positioning and timing products

The ZED-F9P high precision positioning module was one of our biggest launches of 2018. By delivering cm-level accuracy within seconds, it is perfect for machine control, ground robotic vehicles and unmanned aerial vehicles (UAVs). Moreover, it will combine with the forthcoming Sapcorda correction data service from our joint venture with Bosch, Geo++, and Mitsubishi Electric. This will enable F9P customers to achieve high levels of precision anywhere in the world, which will create exciting new opportunities, particularly in automotive and industrial markets.

At the same time, we launched a sister product to the F9P, the ZED-F9T. This high-accuracy timing module achieves the nanosecond-level accuracy essential to 5G cellular infrastructure. With 5G set to flourish over the coming years and the necessity for significantly more base stations than 4G, we are strongly positioned to supply the chips that will underpin this revolution in communication networks.

Future focus

Our ongoing research and development efforts (see the Innovation section) continue to focus on enhancing the u-blox product and service portfolio, with a particular emphasis on some key areas:

Security

As always, security remains a critical pillar in our product and service development roadmap, and we continue to integrate security in hardware and software. Our newly announced partnership with the Kudelski Group, for example, will further enable us to offer some pioneering and sophisticated new capabilities in this space over the coming months and years.

Our Firmware Over the Air (FOTA) service is now active and enhancing our security offering by provideing an efficient way of quickly deploying new features and security patches to devices in the field. We are committed to continuing to enhance this offering to meet our global customers' needs.

Our own silicon

It remains our goal to deliver products using our own silicon. This puts us in a unique industry position to deliver tomorrow's solutions exactly addressing the needs of our customers. We have made substantial progress in recent years across our three product centers and will continue with this strategy as it drives strong financial and operational benefits while enabling the delivery of functionality, features, and services to our customers.

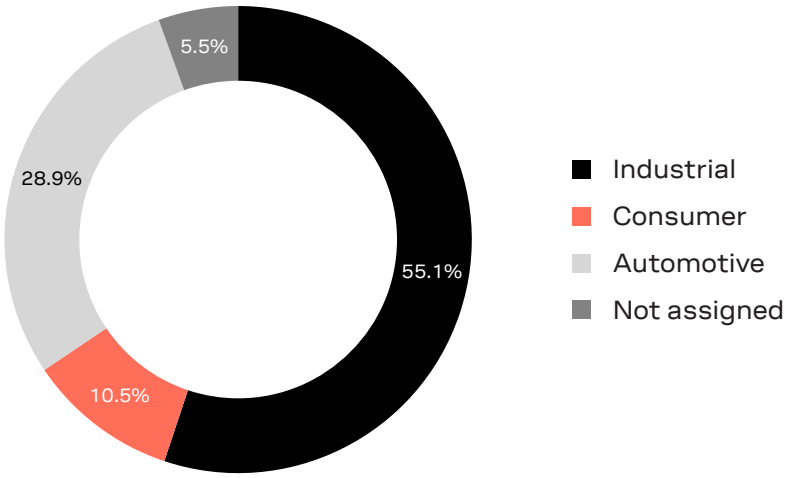
Adding more value by offering services

Services are becoming an increasingly important part of our offering, because they enable us to further differentiate our products by adding essential value for our customers. Whether it is to support increased security, higher location-accuracy, or complementary functionality, we will continue to identify and develop services that give our existing and future customers more reasons to choose u-blox.

Markets

As the digital transformation takes hold across our key markets, changing the way we live, move, and work, it's redefining our customers' needs and businesses, and opening up an exceptional opportunity for us to create value.





At u-blox, we focus on the market in 3 separate segments:

Industrial
This is the largest market sector we serve, covering everything from fleet tracking, cargo monitoring, smart street lighting, and medical devices, through to the use of our timing solutions for 4G and 5G cellular systems. The Industrial Internet of Things is becoming reality as many applications that were stand-alone before now become connected to the cloud.

The key requirement for modern industry is to know what is happening, when it is happening, and where it is happening. Customers also demand highly secure devices that perform reliably, even when exposed to electromagnetic noise and harsh environmental conditions. This is where u-blox products really excel.

Automotive
This expanding market brings exciting growth opportunities for u-blox. The ever-increasing focus on autonomous vehicles means there is a rising need for both cm-level high-precision positioning and secure vehicle-to-everything (V2X) communication. Our new UBX-P3 V2X short-range and F9 GNSS chips, which we launched during 2018, give us a high-quality offering that precisely meets these requirements.

In parallel with the push for greater vehicle autonomy, government clean air initiatives are accelerating the adoption of electric vehicles (EVs). This particular market includes a lot of new automakers, who are looking to innovate fast and in-source key elements of the design process, including the on-board electronics. u-blox is perfectly positioned to partner with these EV makers, providing the products, services, and engineering support to help them execute their rapid design cycles. It's a market where we are already seeing significant traction.

Consumer
The consumer space continues to be driven by the proliferation of smart technology, notably sport and fitness equipment, people and pet trackers, action cameras, and more futuristic kit, such as robotic lawnmowers and consumer drones.

Many consumer devices require communication and location-awareness solutions that strike a delicate balance between size, weight, performance, and battery life. Our focus on meeting these needs, including through our all-in-one systems-in-packages (SiPs) and various modules with low-power modes, helps our customers quickly create attractive and marketable products.

Customers

u-blox – a dependable global partner





Our broad and diverse customer base – spread across automotive, industrial, and consumer markets in the Americas, EMEA, and APAC – has long been one of our biggest strengths. In 2018 we continued to grow our customer base resulting in over 6900 across the globe.

Importantly, we are not reliant on any single customer: even our largest customer accounts for no more than 4% of our revenues. With our 104 largest customers based in 28 different countries, we are truly diversified across accounts and geographies.

Key to building and nurturing this customer base is our ongoing commitment to customer satisfaction throughout the lifecycle of our products. Our worldwide pre-sales support engineer teams play an essential role, guiding customers through their journey from choosing the right chip or module to integrating it into their designs and supporting it throughout its life.

This large and loyal customer base continues to give us the stable platform we need to grow our business. Our sales, R&D, and support centers span the globe, allowing us to better serve our customers.

Customers

LynQ selects the compact u-blox M8 GNSS receiver

LynQ selects the compact u-blox M8 GNSS receiver for its pioneering tracking device
People across the globe are adopting advanced technology to track their fitness level, their own location, and that of others. LynQ has created a versatile personal tracking device that enables people to find one another without the need for phones, maps, network reception, or subscriptions. The compact handheld tracker uses a u-blox CAM-M8Q GNSS receiver to pinpoint each individual's location. Low-power, long-range radio then enables paired devices to communicate with one another directly, pointing people towards their friends, family (especially children), or even pets. The CAM-M8Q's low power consumption helped LynQ achieve an impressive three-day battery life for its trackers.

With the need to create a product that was both attractively priced and exceptionally reliable, even in harsh conditions, LynQ was impressed by the u-blox module and the support we provided. Drew Lauter, Chief Operating Officer at LynQ, explains: "We're extremely price sensitive, yet we need a highly dependable GNSS module. u-blox worked closely with us to deliver that."

John De Cristofaro, VP Engineering at LynQ, adds: "As an engineer for a start-up where I'm the sole hardware designer, the smart design and easy integration of u-blox's M8 modules were very useful to me in achieving the level of miniaturization and performance our product requires. Having a partner like u-blox, with their effective documentation and support, allows me and my firmware team to stay nimble and innovate on new IP, instead of wasting time struggling to write drivers from poorly-written or confusing datasheets."



SARA-R4 helps produce better wine





How the SARA-R4 is helping grape-growers produce better wine with BeWhere
IoT is set to push the future of agriculture and farming to the next level. BeWhere provides innovative ways for customers to track moving assets or keep tabs on environmental conditions in real time. In 2018, it rolled out its new Mobile-IoT (M-IoT) beacons in an altogether new environment: an ice winery.

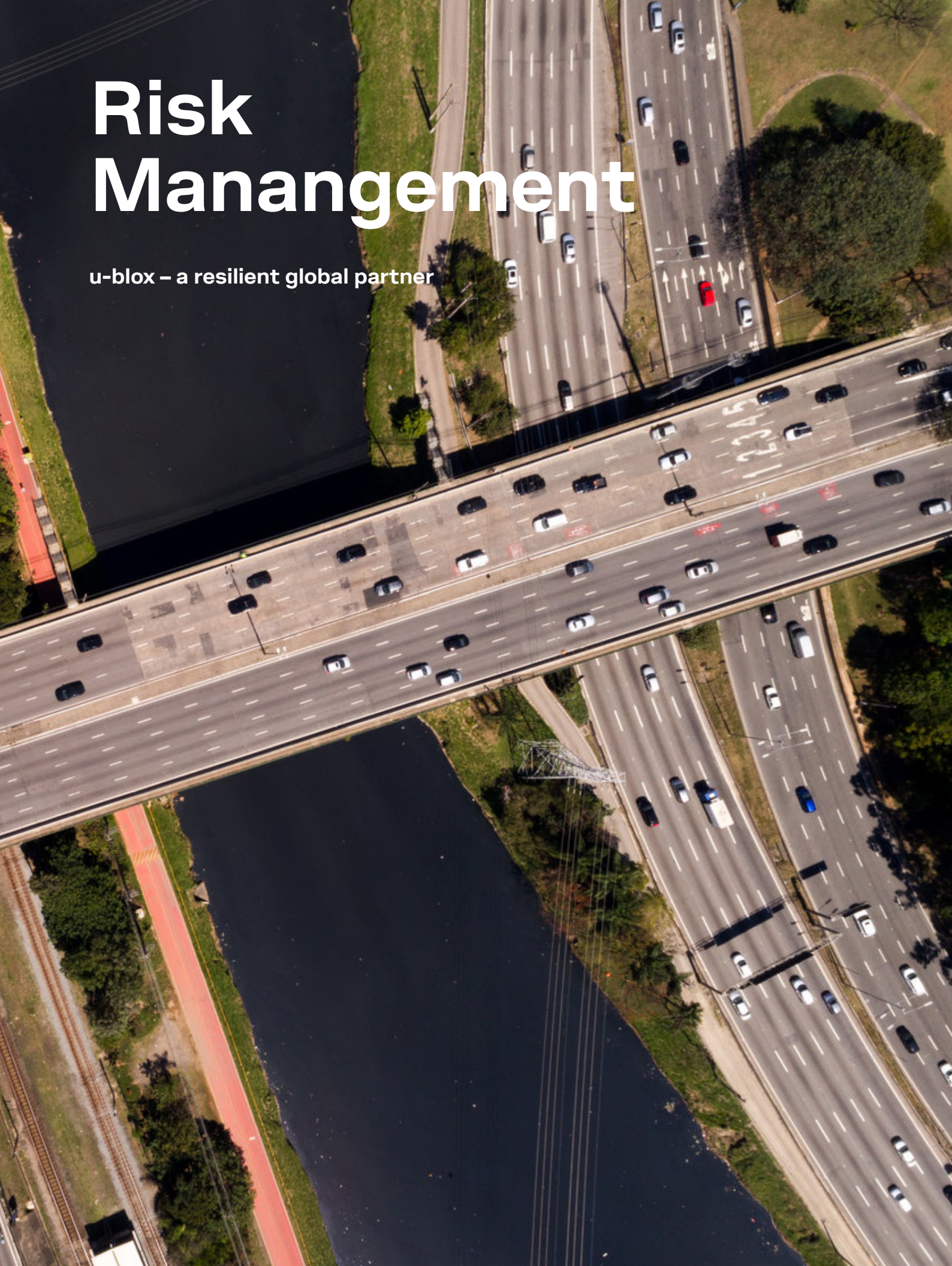
Environmental conditions in any winery have an enormous impact on the quality of the grape and hence the value of the wine they produce. To help growers manage their crops more effectively, BeWhere partnered with Huawei Technologies Co., Ltd, Bell Canada, and Henry of Pelham winery to demonstrate its rugged, self-powered M-IoT offering.

Sensors measure temperature, pressure, and humidity around the site, even detecting how warm or cold certain individual grapes are. Using a u-blox SARA R4 LTE-M/NB-IoT module, they send these insights to the cloud, from where the growers can access them on any device and consequently take action to improve their crop. In Henry of Pelham's case, as an ice winery, this could involve activating its frost fans to regulate temperatures.

These BeWhere M-IoT beacons were the first North American product to use this generation of u-blox low power wide area (LPWA) modules, which are optimized for efficiently sending small amounts of data using very little energy. As a result, each BeWhere M-IoT sensor typically transmits just 500 KB per month and can be powered using a compact photovoltaic panel.

Risk Manangement

u-blox – a resilient global partner



Assessing and controlling risk is crucial to sustainable business succes. u-blox employs strategies that effectively mitigate risk and prevent losses.

RISKS	RISK MITIGATION
Markets and customers Economic and market-trend uncertainties could impact our business and customer demand. This may lead to lower volumes and decreased profitability.	• Customer diversification: No single customer accounts for more than 3.7% of u-blox's turnover. • Continual expansion of the customer base. • Continuous monitoring and assessment of market developments and needs.
Competition Our markets are highly competitive in terms of pricing, product features, and service quality. In many sectors we face price pressures that could negatively impact our results.	• Review and replan R&D activities every 6 months. • Foster a high level of innovation. • Maintain high technical support capabilities globally. • Product range well structured to provide customers with solutions tailored to their needs.
IP Competitors or other parties in our industry may seek to yield benefits from our technical innovations by duplicating our products.	• Maintain a high level of trade secrecy. • Protect our current business and IP from being copied or used by others. by appropriate use of patents, copyrights, and trade secrets on a global basis. • Accelerate the innovation rate. • Manage third party licenses.
Product quality Poor product quality may result in reputational and brand damage, resulting in lower volumes and financial claims.	• Continual expansion of the quality management system and laboratory capabilities. • Thorough testing and qualification at our own laboratory facilities. • Maintain high technical support level globally.
Innovation u-blox's competitive position, sales and earnings depend significantly on the development of new products and technologies. Failure to achieve our aggressive R&D and innovation goals could negatively impact our ability to grow.	• Continual stream of new products launched yearly with targeted features to several markets. • Expensed CHF 74.9 million, or 19.1% of revenues in R&D in 2018.

RISKS	RISK MITIGATION
Personnel Skilled and dedicated employees are essential for the success of our growth-oriented corporate strategy. The loss of these individuals could disrupt the company's operations.	• Globally positioning the company as an attractive employer. • Develop and increase management talent pipeline. • Regular employee satisfaction survey. • Maintain attractive employment conditions and compensation packages plus a stock option plan. • Offer career path opportunities group wide.
Suppliers u-blox outsources its capital-intensive production to leading production suppliers around the world. Rising raw material prices, capacity constraints, or business interruption could lead to a shortage of supply with negative consequences for our business.	• Lean supply base with few key suppliers. • Long-term relationships with suppliers and close interaction to plan and manage capacity. • Inventory buffers to respond to unplanned demand fluctuations.
Compliance Non-compliant or unethical behavior could lead to reputational damage, fines, and liability claims.	• Active fostering of high ethical standards and membership in the UN Global Compact • u-blox Code of Conduct. • Anti-bribery policy. • Speak-up culture, formal compliance process and sanctions. • Sustainable supplier program containing regular risk assessments and inspections of production suppliers' operations.
Currency fluctuations The majority of u-blox's revenue, material costs and R&D expenses are in US dollar currency.	• Foster natural hedging by matching revenue currency amounts with expense currency amounts.
Credit Credit risks arising from financial institutions and from customers could have a negative impact on u-blox's financial performance.	• Individual risk assessment of customers and definition of appropriate credit lines. • Insurance for all customer credit lines. • Frequent and thorough follow-up on late payments.
Liquidity Failure in liquidity management may have a negative effect on u-blox's financial performance.	• Monitor our liquidity on a quarterly basis. • Cash flow program to optimize liquidity and cash flow management. • Efficient use of available cash through cash pooling.

Sustainability



As a global leader in wireless communication and positioning, our products and services are used by billions of people every day. And with this great power comes great responsibility, which is why we are always looking for ways to ensure that every part of our operations is run as sustainably as possible.

We take great care to maintain a sustainable business model that looks after the interests of our customers, shareholders, the environment, and the communities we operate in. Underpinning this aim are our five pillars of corporate social responsibility.

Business ethics

Adhering to strict ethical standards
As a participant of the UN Global Compact, we've committed to respecting and upholding high standards around human rights, labor, the environment, and anti-corruption. It also means we actively support projects aiming to benefit society.

Our global Code of Conduct
As a global business, with employees from every corner of the planet, we need a universal set of values, behaviors and ethical standards that we can all buy into. These form the foundations for how we work every day, and are set out in our Code of Conduct.

This document is available to our workforce in seven languages, and is complemented by a variety of supporting material. The Code of Conduct is aligned to the guidelines in the UN Global Compact and sets out the standards we expect from our employees, suppliers, and any other individual or organization acting on behalf of u-blox.

Everyone at u-blox must complete an annual Code of Conduct e-learning course to ensure its principles – particularly around anti-bribery – remain in the forefronts of our minds.

Combating bribery and corruption
Bribery and corruption have no place in business or society, and as a responsible global company, we believe we can make a difference by combating both practices if we encounter them.

This is why we have clear and strict rules for our people to follow if they experience attempted corruption or bribery. And we're delighted to say our record in 2018 was unblemished, with u-blox not involved in any legal proceedings or investigations.

Insider trading
Our employees are forbidden from trading u-blox shares or sharing information with others when they have knowledge of specific information that might influence the stock price.

Political affiliations
We have no financial interests in any political party or organization.

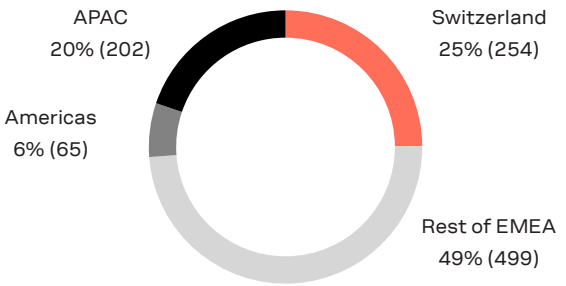
Privacy, confidentiality and data protection
Protecting our employees', customers', suppliers' and partners' data is something we take extremely seriously. We spare no effort to ensure we do this, in line with all relevant data protection legislation.

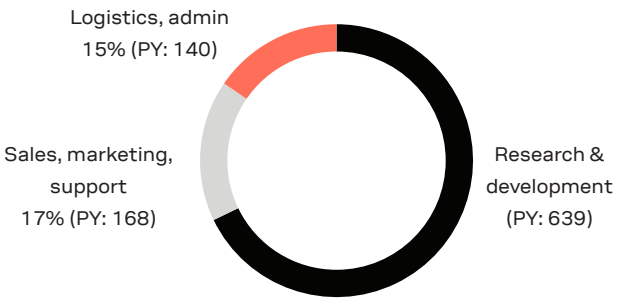
Employees

For us to maintain our position as a leader in our markets, we need to employ the best people and provide them with an environment in which they can develop and thrive. Being an attractive place to work is therefore hugely important, both for employee recruitment and retention: by getting this right, people want to join us, and then stick around to fulfil their potential.

We're encouraged that our reputation as a desirable place to work remains strong, underlined by the fact we regularly appear in Switzerland's top-100-company list. Low staff turnover – 7.77% in 2018 – is another good indicator of employee satisfaction.

Our employee numbers
2018 saw our headcount grow to 1042, of which around 25% are based in our Swiss HQ. The remainder are spread across our 15 R&D centers and 15 sales and marketing offices around the world.





Total = 1'020 FTE (PY: 947.3 FTE)

Investing in our people
We place huge emphasis on developing our employees' personal and professional skills, so they can grow to be the best they possibly can. Periodic reviews enable our people to assess their progress against personal development plans, which include salary and promotion guidelines. And our generous pay and ethos of promoting from within provide a constant reminder that we reward hard work and achievement. In 2018, we paid out a total of CHF 78.2 million in salaries and staff benefits – up from CHF 70.5 million in 2017.

Encouraging diversity
Although we have a strictly non-discriminatory recruitment and employment policy, our workforce is largely male. This is primarily because many of our roles require individuals with a background in engineering, which is an area where women are typically under-represented. Not just with respect to gender, also with respect to age, we encourage diversity. 21 of the new hires in 2018 were age 50 or above, 6 of the new hires were even 55 or above.

We're keen to see more women working in technical roles at u-blox, which is why we actively support a variety of initiatives to encourage girls and women to study science and engineering-related subjects at school and university. This increases the diversity of the talent pool from which we recruit.

Ensuring employee wellbeing
Employees are not robots, and as their employer, it's our responsibility to look after their wellbeing. This includes creating an attractive work-life balance. To this end, we offer flexible working arrangements, generous holiday allowances and rights to a sabbatical after five years' service.

We also run a program of wellbeing events for our employees, including yoga sessions and running clubs.



Social commitment

As a global citizen, u-blox feels a strong moral duty to give back to communities around the world. To ensure our efforts have maximum impact, we provide this support in a number of ways, from backing causes that are important to individual employees, to larger corporate-level funding programs. We offer funds, products, and time.

Corporate initiatives
As a business, we provide funding for selected larger-scale initiatives around the world.

Throughout 2018, we've continued to support the running of Mettoh school in rural Ghana, working in collaboration with the Savannah Education Trust to provide essential teaching and meals to local children. The school currently has 290 pupils.

Elsewhere, in Madagascar, we've been supporting the ADES initiative to combat climate change since 2011. ADES is seeking to protect the environment by raising awareness of the dangers of deforestation and the health risks of smoke inhalation caused by using traditional wood-fired cooking stoves. By offering families the opportunity to buy solar-powered or energy-efficient stoves, ADES aims to reduce deforestation, cut CO^2 emissions and help communities live healthier lives. During 2018, we provided funding that enabled an ADES team to travel through the country for three months to work directly with local communities. In this time, the team visited several towns and villages and spoke to more than 9700 people.

Employee giving
It's important for us to back causes that are close to our employees' hearts. That's why, for every hour of their own time that an employee spends volunteering for non-profit organizations, we'll pay that organization CHF 10, for a minimum of 10 hours and a maximum of 40.

Interview with Chiara Annunziata, u-blox employee Italy
We spoke to Chiara Annunziata from our Italy team, who has spent time volunteering for ADMO, the organization Donatori Midollo Osseo (Italian bone marrow donation association).



The uGive initiative gives employees the opportunity to volunteer their time to charitable organizations.

Why do you volunteer and why did you choose ADMO?
Chiara Annunziata - Put simply, I want to make a difference to people. Bone marrow transplants can literally save lives, but they rely on being able to find a matching donor on one of the registers. So the more awareness we can create about the life-changing impact of being a donor, the more people we can get signed up, and the more likely that doctors can find matches for their patients. That's why I volunteer for ADMO.

What has the volunteering work involved?
C.A - The main area I've been involved in is raising awareness among young people, so most of the work has been in places where they spend their time. This includes everywhere from schools to sports clubs and dance groups. We've also run city-center events to talk to shoppers and other visitors.

How often do you volunteer?
C.A - It really depends on what events ADMO is running. During the winter, there are sessions in schools almost every week. I usually try to join at least two per month.

Charity name: ADMO
ADMO's aim is to spread the word in Italy about bone marrow donations and encourage people to sign up to the Italian Bone Marrow Donor Registry, the IBMDR. You can discover more about the ADMO at www.admofvg.com and the IBMDR at https://ibmdr.galliera.it/ibmdr/english-version

Supporting the next generation of engineers
It's no overstatement to say that engineers will play a vital role in shaping the future of humanity. That's why we support a variety of causes that encourage the next generation to pursue education and careers in this area.

We provide funding to organizations such as Engineers Shape our Future (IngCH), Jugend forscht, and Electronics4you, which run workshops, demonstrations, and other programs to stimulate interest in technology among young people.

Our products make a difference
Giving money to good causes is an important part of our social commitment. But we have another powerful means of helping out: our products themselves. These give us an opportunity to support causes in ways few other corporations can.

For example, we donated 500 4G modules to No Isolation. This healthcare startup has created a robotic avatar that enables children with long-term illnesses who cannot leave their homes or hospitals, to be part of school lessons, parties, or other activities. Our products enable the avatar to transmit audio and video in real time, enabling children to see and talk to their friends, and hence feel less isolated.

Supply chain

No business operates in isolation: for u-blox to be a genuinely sustainable company, we must ensure our supply chain partners hold similar values and uphold comparable standards to us.

That's why, since 2012, we've run our Sustainable Supplier Program. This has three key objectives:

- Ensure safe working conditions at every stage of the supplier's production process
- Ensure workers are treated with respect and consideration in every aspect of their jobs
- Minimize the supplier's environmental impact

The Sustainable Supplier Program is based on the RBA (formerly EICC) Code of Conduct. This was set out by a number of leading electronics companies who wanted to improve the global supply chain.

We periodically audit our supply chain, including inspections of our suppliers' factories, to ensure all our partners are maintaining the high standards we demand.

Environment

As a citizen of the world, it's our duty to protect our planet for current and future generations. This belief is why we're continually seeking ways to further reduce our own environmental impact and that of our suppliers. The amount of time, effort, and funding we commit to this work underlines how serious we are about environmental sustainability.

Materials and production
We're a fabless semiconductor company, meaning we work with selected partners to manufacture our products. We demand the same high environmental standards of them as we do of ourselves, even though this can be complex and time-consuming.

We forbid the use of conflict materials in our products, and our suppliers put in a lot of effort to ensure they source gold, tin, tungsten, and tantalum from legitimate sources.

We carefully monitor potentially dangerous materials throughout our production cycles, and require our suppliers to do the same.

Reducing greenhouse gas emissions
Right across our operations, we're actively trying to reduce our greenhouse gas footprint. We reimburse employees who use public transport to get to work at our HQ. We've invested in modern video conferencing facilities, which have reduced the need for employees to travel round the world.

And as a fabless manufacturer that works with producers that are ISO 14001-certified and run their own CO^2-reduction programs, we lower our own greenhouse gas footprint further.

Perhaps most significantly of all, though, is the way our products help cut greenhouse gas emissions across a huge variety of use cases. GNSS positioning chips enable drivers to navigate the quickest or shortest route to their destination, or avoid adding to environmentally damaging traffic jams. Elsewhere, communication chips in smart meters mean utility companies needn't send polluting vans around neighborhoods to read meters.

These examples show the impact our technology is already having – and with the Internet of Things set to transform many more parts of our lives, we'll see even more environmental benefits appearing over the coming years.

Information for investors



Share price performance

The share price decreased by approximately 60% during this year going from CHF 191.80 to CHF 78.95

At December 31, 2018, u-blox had 6'289 shareholders. Information on our major shareholders can be found in the Corporate Governance section of the Financial Report.

Dividend

In light of the positive future business outlook and the good cash situation of the company, the Board of Directors has proposed a dividend for 2018 of CHF 1.60 per share, equivalent to a total dividend payment of approximately CHF 11.4 million. The proposed dividend will be put to shareholders for approval at the Annual General Meeting of the company which will be held at 4 PM, April 25, 2019

Share information (on December 31, 2018)

Stock Exchange	SIX Swiss Exchange
	Swiss Security Number / ISIN 3336167 / CH0033361673
Ticker	UBXN
Nominal value	CHF 0.90
Shares issued	7'099'857
Reuters	UBXN S
Bloomberg	UBXN SW

Publications and calendar

u-blox pursues an open and ongoing information policy with the general public and the capital markets. The company also meets investors regularly throughout the year, presents its financial results at analyst meetings and road shows, hosts an analyst day, and keeps its shareholders regularly informed about its business through press releases.

The annual report is published in March and presented at the press conference. It is also available online at: www.u-blox.com/en/investor-relations-section.html. The half-year report is published in August.

April 18, 2019:
Closing of share register for the Annual General Meeting

April 25, 2019:
Annual General Meeting

April 27, 2019:
Proposed ex-dividend trading day

May 3, 2019:
Proposed dividend payout date

August 23, 2019:
Publication of half-year results 2019

Share price (in CHF)	**2018**	**2017**	**2016**
Highest	218.60	220.50	249.00
Lowest	72.05	164.70	162.30
Closing on December 31,	78.95	191.80	191.20
Market capitalization on December 31, (Mio CHF)	561	1'334	1'307

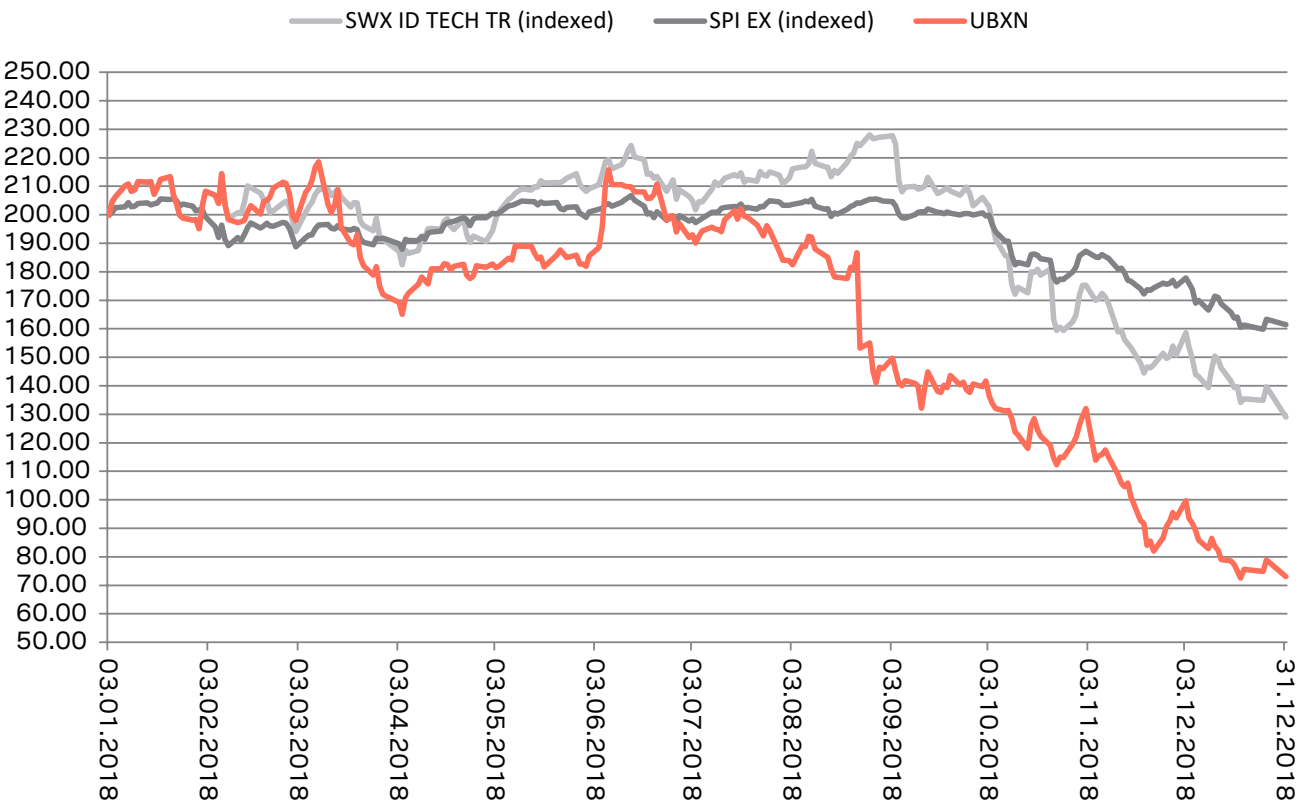
Key Figures	**2018**	**2017**	**2016**
Registered shares with a nominal value of CHF 0.90	7'099'857	6'957'170	6'835'094
Nominal share capital (in TCHF)	6'390	6'261	6'152
Basic earnings per share (in CHF)	5.58	7.42	6.80

561

Market capitalization end 2018 in Mio CHF

5.58

Basic earnings per share (in CHF)



Investor contact

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Investor Relations
Roland Jud
Chief Financial Officer, Email: roland.jud@u-blox.com

Website
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Corporate Governance 2018

Corporate Governance

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Corporate Governance 2018

Corporate Governance

The report describes the management structure, organization and control within the u-blox group at December 31, 2018. The report in conjunction with the Compensation Report fulfills the main requirements of the "Directive on Information relating to Corporate Governance" of the SIX Swiss Exchange.

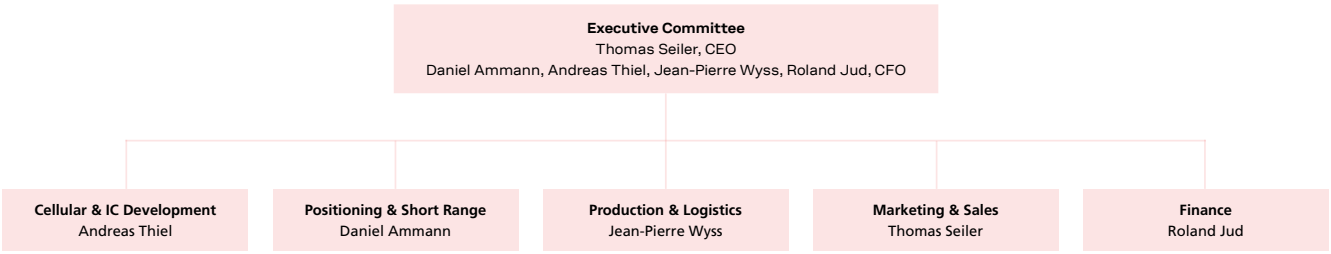
1 Group structure

u-blox group

The registered domicile of u-blox Holding AG and u-blox AG is: Zürcherstrasse 68, 8800 Thalwil, Switzerland. u-blox AG was founded in 1997. u-blox Holding AG, the only shareholder of u-blox AG, was incorporated in September 2007 and listed on the SIX Swiss Exchange on October 26, 2007 (Valor No. 3336167, ISIN CH0033361673, ticker symbol: UBXN). Hereinafter, u-blox Holding AG is referred to as u-blox.

The market capitalization at December 31, 2018 was CHF 561 million based on the outstanding ordinary share capital (7'099'857 shares).

Business operations are conducted through u-blox group companies. u-blox Holding AG directly or indirectly owns all companies belonging to the u-blox group. The shares of these companies are not publicly traded. u-blox subsidiaries are listed in note 2 to the consolidated financial statements. The operational group structure is organized according to different areas of responsibilities of each member of the Executive Committee. These responsibilities apply across the entire group and on a global basis.



2 Shareholders of u-blox

Significant shareholders

As of December 31, 2018, u-blox had 6'289 registered shareholders. According to the disclosures of shareholders, the largest shareholders (> 3%) were:

Credit Suisse Group AG	9.24%
Baillie Gifford & Co, Edinburgh, UK	5.53%
Credit Suisse Fund Management S.A.	5.16%
Atlantic Value General Partner Limited, London, UK	4.73%

The shareholders reduced or increased their shareholding progressively.
For further detail see: www.six-swiss-exchange.com under "Market Data – Overview – Significant Shareholders."

Cross shareholdings

u-blox has no cross shareholdings in any company.

3 Capital structure

Share capital of u-blox

Ordinary share capital

On December 31, 2018 the outstanding ordinary share capital of u-blox was CHF6'389'871.30 fully paid in and divided into 7'099'857 shares of CHF 0.90 nominal value each. There are no preferential voting shares. All shares have equal voting rights. No participation certificates, nonvoting equity securities (Genussscheine) or profit- sharing certificates have been issued.

Conditional share capital

According to article 3a of the articles of association, the share capital of u-blox may be increased by a maximum amount of CHF 221'024.70 by the issuance of no more than 245'583 registered shares that are to be fully paid-in and have a nominal value of CHF 0.90 each; this increase being the result of the exercise of option rights granted to the members of the boards of directors and to the employees of the Company and its subsidiaries in accordance with one or more equity investment plans. The Board of Directors will determine the issue price for the new shares as well as the equity investment plan. Subscription and pre-emptive rights of shareholders are excluded for this conditional capital increase.

The conditional share capital of CHF 221'024.70 corresponds to 3.46% of the outstanding ordinary share capital.

Authorized share capital

According to article 3b of the articles of association, the Board of Directors is authorized to increase the share capital

at any time but no later than by April 30, 2019, by way of issuance of no more than 1'018'000 registered shares that are to be fully paid in with a nominal value of CHF 0.90 each, by a maximum nominal amount of CHF 916'200. An increase in partial amounts is permitted. The Board of Directors will determine the amount of issue, date of dividend entitlement and kind of contributions.
The Board of Directors is entitled to exclude the subscription right of shareholders and allocate such right to third parties in cases where such new shares are to be used for the takeover of companies by way of exchange of shares, or for financing the acquisition of companies, or divisions thereof, or equity interests, or new investment projects of the Company. Shares for which subscription rights were granted but are not exercised will be allocated by the Board of Directors.
The authorized share capital of CHF 916'200 corresponds to 14.3% of the outstanding ordinary share capital.
The Board of Directors has not increased the share capital on the basis of article 3b of the articles of association in 2018.

Changes in share capital
On 1. January 2018, the outstanding ordinary share capital amounted to 6'957'170 registered shares. As a result of the exercise of options in 2018 the outstanding ordinary share capital has increased to 7'099'857 registered shares. Accordingly, the conditional share capital decreased to 108'227 registered shares. Refer to page 63 (consolidated statement of financial position) of this report for more information on changes in share capital over the last three years.

Bonus certificates, options and convertibles
u-blox has not issued bonus certificates, convertible or exchangeable bonds, warrants or other securities granting rights to u-blox shares, except options under the employee stock option plan. The total number of outstanding options issued to employees (including Executive Committee) at December 31, 2018 was 692'846 (9.8% of the outstanding ordinary share capital).

Grant	Vesting date	Expiry date	Exercise price in CHF	Options outstanding at Dec. 31, 2018
2014	January 1, 2017	January 1, 2020	59.29	15'102
2014	January 1, 2017	January 1, 2020	96.15**	2'219
2015	January 1, 2018	January 1, 2021	136.72	77'779
2015	January 1, 2018	January 1, 2021	137.40**	11'518
2016	January 1, 2019	January 1, 2022	210.28	137'614
2016	January 1, 2019	January 1, 2022	214.50***	41'141
2017	January 1, 2020	January 1, 2023	187.09	155'747
2017	January 1, 2020	January 1, 2023	191.20***	49'254
2018	January 1, 2021	January 1, 2024	191.55	167'036
2018	January 1, 2021	January 1, 2024	191.80***	35'436
Total				692'846

* Options granted to employees of u-blox America Inc.
** Options granted to employees of u-blox America Inc., u-blox San Diego Inc., u-blox Espoo Oy, u-blox Melbourn Ltd., Leuven branch.
*** Options granted to employees of u-blox America Inc., u-blox San Diego Inc., u-blox Espoo Oy, u-blox Melbourn Ltd., Leuven branch and CSOP options.

One option grants the right to purchase one share.

4 Shareholder rights

Each registered share entitles the holder to one vote at general meetings. Shareholders representing at least 10% of the share capital may request that an extraordinary general meeting of shareholders be convened. Shareholders representing shares with an aggregate nominal value of at least CHF 1'000'000 may request that an item be included in the agenda of a general meeting.

Such requests must be made in writing at least 45 days before the date of the general meeting, specify the item and contain the proposal on which the shareholder requests a vote. Shareholders have the right to receive dividends, appoint a proxy and other rights as are granted under the Swiss Code of Obligations.

Registration as shareholder
No restrictions apply to the registration as shareholder. Persons who have acquired registered shares will, upon application, be entered in the register of shares as shareholders with voting power, provided they expressly declare to have acquired the shares in their own name and for their own account. Only shareholders registered in the u-blox share register may exercise their voting rights.

Shareholders recorded in the share register as voting shareholders, usually 7-12 days before the date of the general meeting, are admitted to the meeting and entitled to vote. The deadline for registration is defined by the Board of Directors and published on the company's website under Investor Relations (www.u-blox.com).

No restriction on transfer of shares
No restrictions apply to the transfer of shares.

5 Board of Directors

Composition of the Board of Directors at December 31, 2018:

André Müller, Swiss and Italian



André Müller

Function at u-blox

André Müller acts as chairman of the Board of Directors of u-blox Holding AG and u-blox AG since 2018. He is a Non-Executive Director.

Professional background

André Müller holds a master degree in mechanical engineering from the Swiss Federal Institute of Technology Zurich (ETH). André Müller was active as CEO of Cicorel SA (Switzerland) and member of the CICOR group management from 2006 to 2009. From 1998 to 2007 he was CEO and as of 1999 chairman of the board of HCT Shaping Systems SA (Switzerland). From 1993 to 1996 he was vice-president and from 1996 to 1998 General Manager of ESEC SA (Switzerland). Prior to that, he held different positions in research and development divisions in the aerospace industry.

Other positions or consultancy agreements

Mr. André Müller is member of the board of Essemtec AG (Switzerland), DW Holding AG (Switzerland), Dispenser Holding AG (Switzerland) and Bangerter Microtechnik AG (Switzerland).

Dr. Paul Van Iseghem, Belgian



Paul Van Iseghem

Function at u-blox

Dr. Paul Van Iseghem was elected member of the Board of Directors of u-blox Holding AG and u-blox AG in 2011. He is vice-chairman and chairs the audit committee. He is a Non-Executive Director.

Professional background

Dr. Paul Van Iseghem holds a PhD in Engineering from the University of California, USA, and a master degree in Engineering from the University of Leuven, Belgium. He led LEM Holding SA as CEO and president from 2005 to 2010. From 2000 to 2005, he led the components division of LEM. Before joining LEM, he held various management positions in Europe and the US in the engineering industry.

Other positions or consultancy agreements

None.

Prof. Gerhard Tröster, German and Swiss



Gerhard Tröster

Function at u-blox

Prof. Gerhard Tröster has served as a member of the Board of Directors since the incorporation of u-blox Holding AG in 2007. He is also a member of the Board of Directors of u-blox AG. He has served as Chairman and as Executive Officer of u-blox AG between 1997 and 2001 and as Vice-Chairman of the Board of Directors between 2001 and 2003. He is a member of the nomination and compensation committee. He is a Non-Executive Director.

Professional background

Prof. Gerhard Tröster holds a Diploma degree from the Technical University of Karlsruhe, Germany and a PhD degree from the Technical University of Darmstadt, Germany, both in electrical engineering. He led the Advanced Integrated Circuit Design' group at Telefunken Electronic, Germany from 1984 to 1993. Since 1993 he is Professor for electronics at the Swiss Federal Institute of Technology Zurich (ETH) heading the Electronics Laboratory. In 1997, he co-founded u-blox AG.

Other positions or consultancy agreements

None.

Thomas Seiler, Swiss



Thomas Seiler

Function at u-blox

Thomas Seiler has served as a member of the Board of Directors and as CEO since the incorporation of u-blox Holding AG in 2007. He serves as CEO and Head of Marketing and Sales of u-blox AG since 2002. In 2006 he was appointed member of the Board of Directors of u-blox AG.

Professional background

Thomas Seiler holds a master degree in mechanical engineering from the Swiss Federal Institute of Technology Zurich (ETH) and a MBA diploma from INSEAD, France. In 1987 he was appointed member of the executive committee of Melcher Holding AG, Switzerland and CEO from 1991 to 1998. Thereafter, he served as CEO of Kistler Holding AG, Switzerland from 1999 to 2001.

Other positions or consultancy agreements

Thomas Seiler is a member of the Board of Artum AG, Switzerland.

5 Board of Directors (cont.)

Jean-Pierre Wyss, Swiss



Jean-Pierre Wyss

Function at u-blox

Since the incorporation of u-blox Holding AG in 2007 Jean-Pierre Wyss has served as a member of the Board of Directors and, until 2011, as CFO. Since 1997, he has served as a member of the Board of Directors, CFO (until 2011) and Executive Director Production and Logistics of u-blox AG.

Professional background

He holds a master degree in electrical engineering from the Swiss Federal Institute of Technology Zurich (ETH) and a Finance for Executives diploma from INSEAD in Singapore. From 1995 to 1997 he was a research assistant and project manager at ETH. In 1997, he co-founded u-blox AG.

Other positions or consultancy agreements

Jean-Pierre Wyss is a member of the board of Ardo Medical AG, Switzerland.

Gina Domanig, Swiss, American and French



Gina Domanig

Function at u-blox

Gina Domanig has served as a member of the Board of Directors of u-blox Holding AG since her appointment in 2016. She also serves as a member of the Board of Directors of u-blox AG since May 2016. She chairs the nomination and compensation committee. She is a Non-Executive Director.

Professional background

Mrs. Gina Domanig holds a bachelor of science degree in Finance and Economics (Arizona State University) and two MBA degrees (Thunderbird School of Management, USA and ESADE, Spain). Gina Domanig is managing partner at Emerald Technology Ventures AG since 2000. From 1991 to 1999, she held various positions at Sulzer AG prior to becoming Senior Vice President, Head of strategic planning and acquisitions. She held different positions in the finance industry from 1988 to 1991.

Other positions or consultancy agreements

Gina Domanig is a Board member of Die Mobiliar Genossenschaft, Switzerland, Ushr Inc. (USA), GeoDigital International Inc. (Canada), TaKaDu Inc. (Israel), Metgen Oy (Finland), Emerald Technology Ventures AG, Switzerland, Solarpack Corporacion Tecnologica S.A. (Spain) and European Venture Forum, Switzerland.

Ulrich Looser, Swiss



Ulrich Looser

Function at u-blox

Mr. Looser was elected member of the Board of Directors of u-blox Holding AG and u-blox AG since 2018. He is a member of the audit committee. He is a Non-Executive Director.

Professional background

Mr. Looser has vast experience in private equity investments and consultancy. Prior to founding Berg Looser Rauber & Partners in 2009, he was managing director at Accenture from 2001 – 2009, after a career at McKinsey & Company (1987 – 2001).

Mr. Looser holds a master degree in physics from ETH Zurich and a master degree in economics from the University of St. Gallen.

Other positions or consultancy agreements

Ulrich Looser is a member Mr. Looser is a board member of three listed companies (Kardex Group, Straumann Group and LEM) and is a member of various associations and foundations.

Name	Member since	Terms expires	Age	Position	Position Committee
André Müller	2015	2019	66	Chairman	
Paul Van Iseghem	2011	2019	73	Vice-Chairman	Chairman AC
Gerhard Tröster	2007	2019	66	Member	Member NCC
Thomas Seiler	2007	2019	63	Member	
Jean-Pierre Wyss	2007	2019	50	Member	
Gina Domanig	2016	2019	56	Member	Chairman NCC
Ulrich Looser	2018	2019	61	Member	Member AC

Limitations on the number of mandates outside of u-blox Group

The total cumulative number of mandates outside of the u-blox group is limited for members of the Board of Directors as defined in article 24 of the articles of association available on u-blox's website under Investors / Corporate Governance/Articles of Association.

Election and term of office

The members of the Board are elected at the annual general assembly and for a term as defined in article 16 (respectively article 17 for members of the nomination and compensation committee) of the articles of association available on u-blox's website under Investors / Corporate Governance / Articles of Association.

6 Internal organization of the Board of Directors

Decisions are made by the Board of Directors as a whole, with the support of the Nomination and Compensation Committee and the Audit Committee.

The primary functions of the Board of Directors include:

- Providing the strategic direction of the group.
- Determining the organizational structure and governance rules of the group.
- Approving acquisitions.
- Reviewing and approving the annual financial statements and results.
- Preparing matters to be presented at General Meetings.
- Reviewing the Risk Management System.
- Appointment and removal of, as well as the structure of remuneration / compensation payable to members of the Executive Committee and of the Board of Directors.

Further detail is provided under the Rules of Procedure available under the Investors / Corporate Governance / Rules of Procedure section of the company website.

The Board of Directors convened 15 times in 2018. The duration of each meeting was typically between 1 and 4 hours. No external consultants advised the Board of Directors. On average, 75% Board of Directors members attended the meetings.

Role and functioning of the Board Committees
Each Committee member and its chairman are elected by the Board with the exception of the members of the Nomination and Compensation Committee, which are elected by the General Meeting. For further detail see the Rules of Procedure available under the Investors / Corporate Governance / Rules of Procedure section of the company website.

Audit Committee
The Audit Committee is composed of Paul Van Iseghem (chair) and Ulrich Looser. The Audit Committee's main duties include the assessment of:

- The completeness, integrity and transparency of financial statements, their compliance with applicable accounting principles and proper reporting to the public.
- The functionality and effectiveness of external and internal control systems including risk management and compliance.
- The quality of audit services rendered by the external and internal auditors.

The audit committee has no authority to take decisions.

The Committee convened three (3) times: for the preparation of the half year and annual report and to discuss tax strategies. The auditors, the members of the audit committee, each Board member and the General Counsel participated in the meetings for the half year and annual report. The tax strategy meeting was attended by the members of the audit committee, the Chairman of Board and the CFO. The duration of each meeting was about 1 hour. No external consultants advised the Audit Committee.

Nomination and Compensation Committee
The Nomination and Compensation Committee is currently composed of Gina Domanig (chair) and Gerhard Tröster. The Committee supports the Board of Directors in the performance of its duties as follows:

- It prepares the personnel-related decisions to be adopted by the Board of Directors, such as personnel planning, compensation policy and report, appointment and removal of members of the board of Directors;
- It structures the remuneration and compensation payable to members of the Board of Directors and of the Executive Committee;
- It drafts the LTI stock options program;
- It proposes the allotment of options within the scope of the LTI stock options program.

The Nomination and Compensation Committee has no authority to take decisions.

The Committee convened four (4) times. The members of the Committee and the CEO participated in the meeting. The duration of each meeting was about one hour. No external consultant advised the Committee.

Delegation
The Board delegates the executive management of the company to the members of the Executive Committee, as further defined in the Rules of Procedure available under the Investors / Corporate Governance / Rules of Procedure section of the company website.

7 Information and control systems of the Board towards management

Information
The Board ensures that it receives sufficient information from the Executive Committee to perform its supervisory duty. The Board obtains the information required to perform its duties as follows:

- The CEO and the Executive Vice President Production and Logistics are members of the Board of u-blox. All Board members are also members of the Board of u-blox AG. All Executive Committee members participate in the Board meetings and each member presents a status report at each meeting.
- A monthly status report is prepared by the CEO and submitted to the Board.
- The CFO and CEO participated in each Audit Committee meeting. The minutes of meetings are made available to all Board Members.
- The Chairman of the Board meets the CEO approximately every month to discuss the strategy or prepare Board meetings.
- The auditors participated in each Audit Committee meeting.

Risk management
A risk assessment plan for the group is prepared by the Executive Committee and presented to the Board on an ongoing basis. The risk assessment plan identifies the type of risks, the likelihood of the occurrence of the risk, as well as the damage that may be caused if the risk materializes.

At each Board meeting risks and a risk mitigation plan were presented by the Executive Committee. The plan enables the Board to evaluate the appropriateness of the risk management and to monitor the progress achieved in controlling or mitigating the risks.

The Executive Committee is responsible for the execution and implementation of the plan, as well as ensuring that u-blox has the right processes in place to support the early mitigation and avoidance of risks.

8 Management of the group

The members of the Executive Committee are:

Position	Name	Age
CEO	Thomas Seiler	63
CFO	Roland Jud	52
ED Production and Logistics	Jean-Pierre Wyss	50
ED Positioning Products	Daniel Ammann	50
ED Cellular Products	Andreas Thiel	52

The Board has delegated to the Executive Committee the coordination of the group's day-to-day business operations. The Executive Committee is headed by the Chief Executive Officer.

The primary functions of the Executive Committee include:

- Conduct of the day-to-day-business and development of new business.
- Implementation and enforcement of resolutions adopted and instructions given by the Board.
- Management and supervision of staff.

Management contracts
u-blox does not have management contracts with third parties. The Executive Committee members are employed by u-blox AG.

Limitations on the number of mandates outside of u-blox Group
The total cumulative number of mandates outside of the u-blox group is limited for members of the Executive Committee as defined in article 24 of the articles of association available on u-blox's website under Investors / Corporate Governance / Articles of Association.

9 Executive Committee

Thomas Seiler, Swiss



Thomas Seiler

Function at u-blox

Thomas Seiler has served as a member of the Board of Directors and as CEO since the incorporation of u-blox Holding AG in 2007. He serves as CEO and Head of Marketing and Sales of u-blox AG since 2002. In 2006 he was appointed member of the Board of Directors of u-blox AG.

Professional background

Thomas Seiler holds a master degree in mechanical engineering from the Swiss Federal Institute of Technology Zurich (ETH) and a MBA diploma from INSEAD, France. In 1987 he was appointed member of the executive committee of Melcher Holding AG, Switzerland and CEO from 1991 to 1998. Thereafter, he served as CEO of Kistler Holding AG, Switzerland from 1999 to 2001.

Other positions or consultancy agreements

Thomas Seiler is a member of the Board of Artum AG, Switzerland.

Jean-Pierre Wyss, Swiss



Jean-Pierre Wyss

Function at u-blox

Since the incorporation of u-blox Holding AG in 2007 Jean-Pierre Wyss has served as a member of the Board of Directors and, until 2011, as CFO. Since 1997, he has served as a member of the Board of Directors, CFO (until 2011) and Executive Director Production and Logistics of u-blox AG.

Professional background

He holds a master degree in electrical engineering from the Swiss Federal Institute of Technology Zurich (ETH) and a Finance for Executives diploma from INSEAD in Singapore. From 1995 to 1997 he was a research assistant and project manager at ETH. In 1997, he co-founded u-blox AG.

Other positions or consultancy agreements

Jean-Pierre Wyss is a member of the board of Ardo Medical AG, Switzerland.

Daniel Ammann, Swiss



Daniel Ammann

Function at u-blox

Daniel Ammann has served as Executive Vice President (R&D Software) of u-blox Holding AG from 2007 to 2012. He has been a member of the Board of u-blox AG from 1997 to 2003 and acted as Executive Vice President R&D Software from 1997 to 2012. He acts as Executive Director Positioning Product Development since 2012.

Professional background

He holds a master degree in electrical engineering from the Swiss Federal Institute of Technology Zurich (ETH). From 1995 to 1997 he was a research assistant and project manager at ETH. In 1997, he co-founded u-blox AG.

Other positions or consultancy agreements

Daniel Ammann is a member of the Board of Piavita, Switzerland.

Andreas Thiel, German and Swiss



Andreas Thiel

Function at u-blox

Andreas Thiel has served as Executive Vice President (R&D Hardware) of u-blox Holding AG from 2007 to 2012 and as Executive Vice President R&D Hardware of u-blox AG from 1997 to 2012. He acts as Executive Director Cellular Product Development and IC Design Services since 2012.

Professional background

He holds a master degree in electrical engineering from Aachen University (RWTH) in Germany. From 1994 to 1997 he was a research assistant and project manager at the Swiss Federal Institute of Technology Zurich (ETH). In 1997, he co-founded u-blox AG.

Other positions or consultancy agreements

None.

9 Executive Committee (cont.)

Roland Jud, Swiss



Roland Jud

Function at u-blox

Roland Jud has been appointed CFO of both u-blox Holding AG and u-blox AG in 2011.

Professional background

He holds a master degree in economics from the University of St. Gallen (HSG), a diploma as Swiss Certified Auditor (CPA) and a diploma as Certified IFRS/ IAS Accountant. From 1992 until 1999 he was auditor and consultant at KPMG. He served as Group Controller and Deputy CFO at Gurit-Heberlein Holding AG, Switzerland from 1999 to 2008. Thereafter, he was Head of Accounting, Reporting and ICS at Ascom Holding AG, Switzerland until 2010. From 2010 until 2011 he held the position of CFO and member of the executive committee at Nexgen AG, Switzerland.

Other positions or consultancy agreements

Roland Jud is a member of the advisory board of c-crowd AG, Zürich.

10 Shareholdings

Ownership of u-blox shares

The total number of u-blox shares owned by members of the Executive Committee and the Board of Directors at December 31, 2018 (including holdings of "persons closely linked"*) is shown in the tables below.

Non-executive members of the Board

	Number of shares
André Müller	2'000
Gerhard Tröster	14'161
Paul Van Iseghem	2'524
Gina Domanig	400
Ulrich Looser	1'000

Executive Committee

	Number of shares
Thomas Seiler	136'854
Andreas Thiel	40'510
Jean-Pierre Wyss	23'087
Daniel Ammann	30'547
Roland Jud	4'363

* "Persons closely linked" are (i) their spouse, (ii) their children below age 18, (iii) any legal entities that they own or otherwise control, or (iv) any legal or natural person who is acting as their fiduciary."

Ownership of u-blox options

Board member do not own options. The total number of u-blox options owned by members of the Executive Committee at December 31, 2018 is shown in the tables below.

Executive Committee	Number of vested Options*	Number of non vested Options**
Thomas Seiler	4'304	20'173
Andreas Thiel	7'804	20'173
Jean-Pierre Wyss	7'804	20'173
Daniel Ammann	0	20'173
Roland Jud	7'609	19'670

* Stock option grants in 2014, 2015
** Stock option grants in 2016, 2017, 2018.

With respect to options with a grant date on or prior to January 1, 2012 and on or after January 1, 2015, the exercise price is the lower amount of a) the volume-weighted average share price on the SIX Swiss Exchange during the 30 trading days preceding the grant date and b) the closing share price at the SIX Swiss Exchange on the last trading day before the grant date.

With respect to options with a grant date on January 1, 2014 and with a grant date on January 1, 2013 the exercise price is calculated by deducting 33% from the lower price of a) the volume-weighted average share price on the SIX Swiss Exchange during the 30 trading days preceding the grant date and b) the closing share price at the SIX Swiss Exchange on the last trading day before the grant date.

The exercise price, vesting period, duration and subscription ratio of each plan are mentioned in section 3 of the Corporate Governance Report (Capital structure).

11 Auditors

Duration of the mandate and term of office of the lead auditor
In 2018, KPMG AG, Lucerne was re-appointed as Statutory Auditor of u-blox. KPMG Lucerne has been appointed each year since incorporation of u-blox in 2007. Mr. Daniel Haas, Partner, has been acting as the lead auditor since 2014. As provided under the Swiss Code of Obligations, the lead auditor will be rotated every seven years.

Auditing fees
Total auditing fees charged by KPMG for mandatory audits of u-blox for the financial year 2018 amount to CHF 483‘750 (excl. VAT).

Additional fees
Additional fees charged by KPMG during the financial year 2018 amounted to CHF 220‘559 (excl. VAT) for tax advice and consulting.

Supervisory and control instruments
The External Auditor presents to the Audit Committee an overview of issues found during the audit of the annual financial statement, the half year financial statement, as well as the internal control system. The External Auditors were present at two Audit Committee meetings in 2018.

The Board of Directors monitors the work and audit results of the External Auditors through the Audit Committee. The Audit Committee reviews annually the selection of auditors as well as the level of the external audit fees. In its review, the Audit Committee takes into account the External Auditor’s quality of service, the expenses compared to other auditing companies and the fees for non-audit related services.

12 Information policy

In addition to the annual report, u-blox publishes an interim financial report. u-blox provides stock-price-sensitive information in accordance with the ad hoc publicity requirements of the Listing Rules of the SIX Swiss Exchange and on its website under https://www.u-blox.com/de/investor-relations.

Official notices are published in the Swiss Official Gazette of Commerce. Additionally, all interested parties have the possibility to directly receive from u-blox, via an e-mail distribution list, free and timely notification of publicly released information. All of this information as well as the registration form for the e-mail distribution service, general corporate information and company publications can be found on the Investor Relations section of u-blox’ website: https://www.u-blox.com/en.

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13 Compensation policy and report 2018

13.1 Compensation policy
13.2 Compensation report
13.3 Auditor's report

Dear Shareholder,

As Chair of the Nomination and Compensation Committee, I am pleased to present the 2018 Compensation Policy and Report which provide an overview of u-blox's policy and the compensation for the Board of Directors and Executive Committee for the year under review. The policy and report include important information to be considered by the shareholders and complies with the Articles 14-16 of the Ordinance against Excessive Compensation in Listed Stock Corporations, Article 633c of the Swiss Code of Obligations, the SIX Swiss Exchange's Directive on Information relating to Corporate Governance, as well as the Swiss Code of Best Practice for Corporate Governance of economiesuisse.

2018 Company Performance

Broadly, market conditions in 2018 were not favorable for our business. In the Americas, revenues declined slightly due to the initial slow migration to LTE, however we now see this improving. In Asia, several factors impacted our business including the negative impact of the US-China trade war and the positive impact of growth in the infrastructure, car navigation, and aftermarket car electronics sectors. Meanwhile EMEA revenues grew an impressive 21% in 2018 and we expect that trend to continue. For 2019 we foresee an improvement of the macro trends and a return to attractive growth in all regions. Our optimism for the future is based on several factors:

- Our product initiatives are at the forefront important megatrends in the industry.
- We continue to convince key customers with our technology and innovation leadership.
- Our core intellectual property provides the platform to deliver value-added services.
- Our product diversification by applications and geography assure stability.
- Our focus on increasing the number of products using our own silicon provides a substantial competitive advantage.

New launches in 2018 have strengthened our position in the market, with the UBX-P3 V2X communication chips and the F9 high-precision positioning chips and modules, both platforms well-received by customers. The F9 is compatible with correctional data services, such as the one we're bringing to market with Bosch, Geo++ and Mitsubishi Electric through the Sapcorda joint venture.

Nomination and Compensation Committee Activities

In the past year the Nomination and Compensation Committee met four times. The focus was on succession planning for the Board of Directors, assessing 2017 performance, setting targets for 2018, reviewing and ensuring compliance with regulatory and corporate governance developments, as well as creating this Compensation Report. During the year, we engaged in dialogue with our major shareholders and proxy advisors to gather feedback on our compensation systems and disclosures, and we considered their feedback when taking decisions.

At the 2019 Annual General Meeting, we will seek your approval of the total maximum compensation amount for the Board of Directors for the period until the 2020 Annual General Meeting and for the Executive Committee for the financial year 2020. Further, you will have the opportunity to participate in the consultative vote on the 2018 Compensation Report. In the Compensation Report, you will find that the actual compensation awarded to the Board of Directors for the compensation period ending with the 2019 Annual General Meeting and the actual compensation awarded to the Executive Committee in 2018 are within the limits approved at the Annual General Meetings 2017. Also we are glad to report that the newly established share ownership guideline was fulfilled by both, the members of the Board and the members of the Executive Committee.

At the forthcoming meeting, Prof. Dr. Gerhard Tröster and Dr. Paul Van Iseghem will retire as members of our board and therefore will not stand for re-election. Both have been instrumental in the development of the company – Prof. Dr. Gerhard Tröster as founding professor since u-blox was spun off from the ETH in 1997 and Dr. Paul van Iseghem as Vice Chairman of the board since 2011.

We are very pleased to propose both of the following candidates for election:

- **Dr. Annette Rinck** as non-executive director to join the Board of Directors of u-blox Holding AG
- **Markus Borchert** as non-executive director to join the Board of Directors of u-blox Holding AG

Looking ahead, we will continue to regularly review our compensation policy to ensure it promotes and rewards performance in alignment with the long-term interests of our shareholders and compliance with the evolving regulatory framework. We will also continue to engage constructively with regulators, shareholders and other stakeholders and value the insight these discussions provide.

We trust that you will find this report informative.

Gina Domanig
Chair of the Nomination and Compensation
Committee u-blox AG

13.1 Compensation Policy

Executive Committee

Compensation Objectives

The compensation policy for the u-blox Executive Committee is designed to achieve the following objectives:

- Competitive
  Total remuneration package is competitive, enabling u-blox to attract and retain highly skilled and motivated entrepreneurial executive staff over the long term.
- Alignment of Interests
  The form of compensation provides an incentive to achieve a sustainable increase in the shareholder value thus ensuring an alignment of interests between management and the long-term interests of shareholders.
- Reward Performance and Team Spirit
  The compensation system is designed to promote medium and long-term success and to foster team spirit among Executive Committee members. Remuneration that is independent of performance, guaranteed or discretionary, and in particular "pay for failure", should be avoided. The achievement of Key Performance Indicators should be rewarded as a team achievement.
- Fair and Transparent
  The compensation decisions are fair and transparent based on function and level of responsibility and ensuring that variable components are based on agreed and clear measurable performance metrics in line with the company's KPIs.

The compensation policy for the Board of Directors is designed to attract and retain experienced and motivated people for the Board of Directors function. The remuneration should be competitive and in an appropriate relation to the market as well as ensure the independence of the Board of Directors in its supervisory capacity of the Executive Committee.

Determination of Compensation

Nomination and Compensation Committee

In accordance with the Articles of Incorporation and the Organizational Regulations of u-blox, the Nomination and Compensation Committee (NCC) supports the Board of Directors in fulfilling its duties and responsibilities regarding compensation, including

- Periodic review of the compensation policy and principles
- Periodic benchmarking of the levels of compensation to ensure market conformity and competitiveness
- Annual review of performance metrics: KPI selection and targets
- Annual assessment of the performance of the CEO and the Executive Committee members
- Annual review of the compensation of the CEO and the Executive Committee members
- Preparation of the Compensation Report

Annual Process and Responsibilities for Compensation of Executive Committee and Board of Directors

	Q1	April	Q3	Q4
Compensation policy review and compensation principles for next financial year			NCC BoD	
Compensation plans, budget and share award plan design				CEO* NCC
Target compensation of EC members for next financial year	NCC BoD			
Calculation of Variable Bonus for EC members for previous financial year	CEO*, NCC, BoD			
Option grant proposal for EC members for previous financial year	CEO*, NCC, BoD			
Maximum aggregate compensation amount of the EC for next compensation period	NCC **BoD**	AGM		
Compensation of Board of Directors for next compensation period	NCC **BoD**	AGM		
Compensation Report (consultative vote)	NCC **BoD**	AGM		
* CEO is not present when discussing his compensation	■ body which recommends ■ body which decides to propose to AGM ■ body which approves		BoD = Board of Directors NCC = Nomination and Compensation Committee CEO = Chief Executive Officer	

The members of the NCC are exclusively independent, non-executive members of the Board of Directors and are elected annually by the General Assembly. The NCC is chaired by a member nominated by the Board of Directors. Since the 2018 Annual General Meeting, the NCC consists of Gina Domanig (chair) and Gerhard Tröster. The NCC meets on an as-needed basis but no less than twice per annum. The CEO, CFO, other members of the Board of Directors, the auditors or external consultants may, at the request of the chairman of the NCC, attend the meetings in an advisory capacity. Minutes of the meetings are distributed to the Board of Directors. The NCC Chair reports on the activities of the NCC at the following meeting of the Board of Directors.

Annual Process and Responsibilities for Compensation of Executive Committee and Board of Directors

Process of Determining Compensation
To assess the competitiveness of the total remuneration for Group Executive Management, the NCC conducts a periodic compensation policy review which is supported by external consultants considering market and regulatory developments. Proposed changes to the policy are submitted to the Board of Directors for approval.

The NCC reviews the actual compensation of members of the Board of Directors and the Executive Committee members annually. On a tri-annual basis, the total compensation is benchmarked against companies in the SWX Technology index (SWX ID TECH TR, hereinafter the "Benchmark") however, in 2018, no benchmarking was undertaken. During the year, the company has engaged with an external consultant, to advise on best practices and evolving regulatory framework in the area of corporate governance and executive remuneration. No other mandate was given to the consultant.

The Board of Directors approves the compensation policy and proposes the total maximum compensation of the members of the Executive Committee and for the members of the Board of Directors to the annual General Assembly for approval. Only non-executive members of the Board of Directors have voting rights on the compensation policy and the total compensation. The total compensation is based on a discretionary decision of the Board of Directors based on the Benchmark and the salary structure of the Executive Committee.

Compensation System for the Executive Committee
The remuneration of the Executive Committee members consists of a base salary, variable bonus (short term incentive), stock options (long term incentive), contributions to pension funds and social insurance.

The compensation system is a combination of fixed and variable components based on short and long-term performance. A greater portion of the overall compensation is dependent upon performance yet capped as to not incentivize excessive risk taking or maximizing short term performance at the risk of long-term sustainable performance. Executive Committee members are not remunerated for Board of Director membership or other executive positions held within the Group.

Base Salary
The base salary of the CEO is determined to ensure a competitive base salary compared to base salaries offered by other companies in the Benchmark and considering the tasks, responsibilities and experience.

The base salary of the other Executive Committee members is defined to achieve both a competitive base salary compared to base salaries offered by other companies in the Benchmark. In 2018, the Executive Committee salaries were adjusted in line with inflation and the general workforce salary increase. As roles and responsibilities change, the NCC will review salaries accordingly.

Variable Bonus
The bonus is designed to reward the achievement of Key Performance Indicators (KPIs) which reflect the interest of shareholders.

As a rule, KPIs are measurable against objective criteria and, wherever reasonable, identical for each EC member.

The bonus depends on two value-driving KPIs:
I. increase in EBIT margin, and
II. revenue growth rate.

For the CEO, the percentage of base salary for the KPI related bonus is higher than for other members of the Executive Committee. The bonus of the CEO considers both the revenue growth and the EBIT growth, whereby a linear model applies to the revenue growth and an exponential model for the EBIT growth. The bonus for the CEO is defined as a multiplier of the base salary as follows:

$$3 + 0.7 \times (\text{revenue growth rate} - 0.15) \times e^{((\text{EBIT margin} - 0.4) \times 5)}$$

For example: a 20% revenue growth rate and a 10% EBIT margin results in a bonus of 67.7% of the base salary; while a 20% increase in revenue and a 15% EBIT margin results in a bonus of 87%.

The CEO has a maximum bonus of 150% of the base salary. For other Executive Committee members, the impact of KPI related bonus on overall compensation is lower and considers both the revenue growth and the EBIT growth with a linear model. The bonus rate as a multiplier of the base salary is defined as follows for the other EC members:

1 + 0.4 x (revenue growth rate – 0.15) + 2.1 x (EBIT margin – 0.4)

For example: a 20% revenue growth rate and a 10% EBIT margin results in a bonus of 39% of base salary; while a 20% revenue increase and a 15% EBIT margin would result in a 49.5% bonus.

The bonus of the other Executive Committee members is limited to 100% of the base salary.

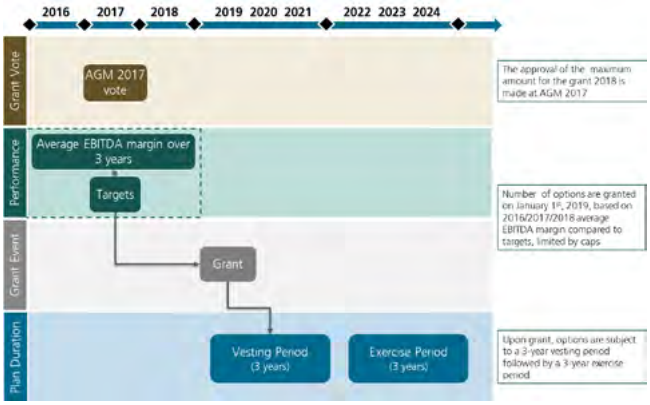
For both cases, no bonus is paid out if the EBIT margin is zero or negative. The bonus is paid out in cash after the Annual General Assembly.

Long Term Incentive Stock Option Plan 2018

The goal of the long-term incentive stock option plan is three-fold: encourage the long-term commitment of management to u-blox; ensure that both shareholders and management have aligned long term interests; and foster team spirit. Each Executive Committee member receives the same number of options.

The Long-Term Incentive Stock Option Plan for FY 2018 was amended at the AGM 2017 to focus on EBITDA margins (as defined by IFRS accounting standards) as it best reflects the financial performance of the company's operations, is a main indicator for comparing market capitalization within a peer group and is aligned with shareholder interests. To ensure the long-term component, the grant is based on the three-year average EBITDA margin relative to a target. The plan includes a defined maximum allocation and a minimum performance threshold below which no allocations are made.

At the beginning of each fiscal year, the NCC proposes the target EBITDA margins to be used in the LTI plan for the following fiscal year taking into consideration the EBITDA margins of the relevant industry peer group, the company's ongoing business expectations and the financial goals. The Board of Directors approves the minimum, target and maximum goals and payout. Approval is sought from the AGM for the maximum compensation including the fair value of the maximum option grant based on a set of assumptions regarding the anticipated business development within the timeframes covered by the proposal and the possible market performance of the u-blox share within those timeframes. The NCC is of the opinion that the performance targets for the LTI-ESOP are commercially sensitive and that it would be detrimental to the interests of the Company to disclose them before the end of the relevant performance period. The performance against those measures will be disclosed after the end of the relevant financial year in that year's compensation report subject to the sensitivity no longer remaining.



After the performance period, the NCC

i. defines the level of actual achievement whereby the number of options granted depends on the achievement of the average EBITDA margins compared to the minimum (0%), target (100%) and maximum (150%), calculated linearly, whereby 100% is equal to 6.000 options;
ii. defines the fair value of an option at grant date;
iii. calculates the number of options to be granted and limited by the following maximum thresholds:
   - the total number of options to be granted to the Executive Committee of five members does not exceed 40'000 options
   - the Fair Value of options at grant does not exceed 100% of the Base Salary of the members
   - the Fair Value of the options at grant does not exceed the amount allocated to the LTI as approved by the General Assembly
iv. proposes to the Board the grant for each member of the Executive Committee.

The Board of Directors decides within its discretion and within the maximum total compensation approved at the previous AGM.

Each option grants the owner the right to purchase one share at a defined price (exercise price). The option can be exercised within the earliest of three years and the latest six years after the grant date. If not exercised, options expire six years after the grant date. In the case of termination of employment, any unvested options expire on the day following the last day of employment of the Executive Committee member. Vesting is accelerated in case of death or disability and, with respect to options granted as from 2014, upon retirement. There are no special provisions (eg vesting acceleration) in case of a change of control.

However, the compensation committee will strive to apply a fair approach, i.e. no more will be paid than is warranted in each individual case and that for good leavers, and in case of change-in-control, LTI awards will be pro-rated for time and performance, if and where possible and appropriate.

The exercise price is defined as the lower of a) the volume-weighted average share price on the SIX Swiss Exchange during the 30 trading days preceding the grant date and b) the closing share price at the SIX Swiss Exchange on the last trading day before the grant date.

The LTI amount can represent a significant portion of the total compensation and thus achieves the objectives of ensuring long-term commitment and incentivizing sustainable increase in shareholder value.

Malus and claw-back provisions
Malus and claw-back provisions apply to forfeit or recover payments made as bonus and under the LTI-ESOP. Such provisions cover situations where the company is required to restate its accounts due to non-compliance with financial reporting requirements under the securities laws at the time of disclosure. In such cases, the Board of Directors is empowered to recalculate the respective payout according to the restated financial results and seek reimbursement of any bonus amount or LTI-ESOP grant allocated in excess of the newly calculated amount. The claw-back clause is applicable for three years after the payment or grant of the respective compensation.

Pension funds and social insurance benefits
The aim is to provide the Executive Committee members and their family members a financial coverage in case of retirement, illness, invalidity or death in line with market practices and regulations. The members of the Executive Committee, as all eligible employees in Switzerland, are insured against the risks of old age, death and disability (AHV). With respect to pension benefits (amounts which give rise to pension entitlements or increase pension benefits), the employer contributes 60% of the obligatory pension scheme fees and approximately 65% of the non-obligatory private pension scheme fees.

Other Benefits
The CEO is entitled to the use of a company car.

Employment contracts
The employment contracts of the members of the Executive Committee may be subject to a minimum of six and a maximum of twelve-months' notice period. No termination benefits are payable. The contracts do not contain a clause relating to change of control. Executive Committee members may be subject to non-compete provisions upon termination of their employment contract which, however, will not exceed 12 months after the termination date. In case an Executive Committee member terminates the employment contract, the company may trigger the non-compete obligation in exchange for a fee limited to 50% of the Executive Committee member's annual base salary.

Loans
No guarantees or loans are granted to members of the Board of Directors or Executive Committee.

Share Ownership Requirements
Executive share ownership guidelines were introduced for the Executive Committee in 2018. This guideline stipulates that the members will acquire and hold u-blox shares equivalent to 250% of base salary for the CEO and 200% for the other Executive Committee. The minimum levels are to be achieved within four years, and such achievement is not altered by later share price variation. Unexercised options do not count towards the ownership requirement.

Approach to recruitment remuneration
On hiring a new Executive Committee member, the NCC would align the proposed remuneration package with the policy in place for Executive Committee at the time of the appointment. In determining the actual remuneration for a new Executive Committee member, the NCC would consider the package in totality, taking into account elements such as the skills and experience of the individual, local market benchmarks, remuneration practice, and the expected contribution of the individual. The NCC would ensure any arrangements agreed would be in the best interests of u-blox and its shareholders and would aim to pay no more than necessary to secure the right candidate. Where considered appropriate, an external candidate may be compensated for remuneration arrangements forfeited on leaving a previous employer. In doing so, relevant factors including any performance conditions attached to these awards, the form in which it was paid and the timeframe of awards would be considered. Buyout awards would be awarded on a 'like for like' basis compared to remuneration being forfeited and would be capped to reflect the value being forfeited. The maximum level of variable pay which could be awarded to a new Executive Committee member, excluding any buyouts, would be in line with the Policy set out. If an Executive Committee member is appointed following u-blox's acquisition of, or merger with, another company, legacy terms and conditions may be honored.

Board of Directors

Compensation System for the Board of Directors
To ensure the independence of the Board of Directors in its supervisory capacity of the Executive Committee, members of the Board of Directors only receive a fixed remuneration and do not participate in the share option scheme, pension scheme and/or performance related pay. In addition to the base director fees, an additional fixed fee is paid for positions of chairman, committee chairman and committee member. The Chairman of the Board is not eligible for additional compensation for participation in committees.

Board compensation including social insurance	Period AGM 2018 through AGM 2019
Base Compensation for chairman of the Board	CHF 158'000
Base Compensation for member of the Board	CHF 90'000
Additional compensation for committee membership	CHF 15'000
Additional compensation for committee chairman	CHF 25'000

The remuneration is paid out in the form of cash only and on a pro-rata basis, twice per annum. Board of Directors compensation does not include any performance or profit-related components such as shares or options.

Actual expenses incurred are reimbursed, according to the company policy, for travel arising out of duties performed on behalf of the Board of Directors. No pension, social insurance contributions or benefits are granted to the Board members, except where compulsory under Swiss law.

Share Ownership Requirements
Board of Director share ownership guidelines were introduced for the Board of Directors in 2018. This guideline stipulates that each member will acquire and hold u-blox shares equivalent to 100% of the annual board fee. The minimum levels are to be achieved within three years and such achievement is not altered by later share price variation.

13.2 Compensation report 2018

13.2.1 Board of Directors

The total amount of compensation of the Board of Directors remained unchanged from 2017. However, individual compensation amounts varied to reflect committee membership changes. The total compensation stayed within the limits as approved by the shareholder meeting (TCHF 600).

Compensation for the members of the Board of Directors 2018[1]

	Fee	Social insurance[2]	Total Compensation
	CHF	CHF	CHF
Fritz Fahrni[3]	49'334	3'157	52'491
André Müller (Chairman)	131'000	9'770	140'770
Paul Van Iseghem (Chairman Audit Committee)	108'000	6'912	114'912
Gerhard Tröster (Member NCC)	100'667	7'550	108'217
Gina Domanig (Chairman NCC)	104'333	7'825	112'158
Ulrich Looser[4] (Member Audit Committee)	64'667	4'139	68'806
Thomas Seiler	0	0	0
Jean-Pierre Wyss	0	0	0
Total	**558'001**	**39'353**	**597'354**

1) The compensation is shown for fiscal year 2018, whereas the approved budget covers the period AGM 2018 to AGM 2019.
2) Mandatory social insurance.
3) Resigned AGM 2018.
4) Elected at AGM 2018.

Compensation for the members of the Board of Directors 2017[1]

	Fee	Social insurance[2]	Total Compensation
	CHF	CHF	CHF
Fritz Fahrni (Chairman)	148'000	9'472	157'472
André Müller (Audit Committee)	97'000	7'275	104'275
Paul Van Iseghem (Chairman Audit Committee)	108'000	6'912	114'912
Gerhard Tröster (Chairman NCC)	108'000	8'100	116'100
Gina Domanig (Member NCC)	97'000	7'275	104'275
Thomas Seiler	0	0	0
Jean-Pierre Wyss	0	0	0
Total	**558'000**	**39'034**	**597'034**

1) The compensation is calculated based on Fiscal year 2017, the numbers are therefore different than the approved budget, which is for the period AGM 2017 to AGM 2018.
2) Mandatory social insurance.

13.2.2 Executive Committee

In fiscal year 2016 a review of the total compensation including base salary, bonus, and stock options of EC members was performed by the NCC and adjustments were made in 2017. The next compensation review will take place in 2019.

Base Salary

The Base Salaries in 2018 increased by 2%.

Variable Bonus

CEO:

For 2018, the bonus of the CEO amounted to 71.15% of the base salary. For the CEO, the bonus amount has decreased due to lower achieved EBIT margin and declining revenue growth rate.

Input data	
Revenue growth rate	-2.6%
EBIT margin	12.4%
Output	
Bonus rate	71.15%

Other Executive Committee members:

For 2018, the bonus of the other Executive Committee members amounted to 34.37% of the base salary. Compared to 2017, the bonus amount for the Executive Committee members has decreased due to lower revenue growth and lower EBIT margins.

Input data	
Revenue growth rate	-2.6%
EBIT margin	12.4%
Output	
Bonus rate	34.37%

The KPIs and formula for determining the variable bonus amount remained unchanged compared to the previous years because the long development times for products (several years), together with the long adoption period of u-blox products by relevant customers, make the selected KPIs most appropriate in this business environment. The long market cycles reward only a long-term strategy and engagement and continual effort by the Executive Committee. Furthermore, over the last decade, the KPIs have remained unchanged.

Long Term Incentive Stock Option Plan

For 2018, the Board of Directors approved the proposal by the NCC, in accordance with the LTI Stock Option Plan 2018, to grant 6'366 options per Executive Committee member. The number of options was determined based on the achieved preceding three-year average EBITDA margin of 20.9% compared to the targets. The targets were defined as follows:

	EBITDA% targets	Options granted
Min	13%	0%
Objective	20%	100%
Max	27%	150%

Options are granted at-the-money (i.e. the strike price equals the lower of the average stock price of the last 30 trading days before the grant date and the stock price at grant date).

13.2.3 Compensation paid to the members of the Executive Committee 2018

The total compensation stayed within the limits as approved by the shareholder meeting (TCHF 7'000).

	Base Salary	Number of Options	Value of Options[1]	Bonus[2]	Pension and Social insurance funds[3]	Other benefits[4]	Total Compensation
	CHF		CHF	CHF	CHF	CHF	CHF
Thomas Seiler, CEO	466'752	6'366	108'413	332'082	204'108	7'977	1'119'332
Jean-Pierre Wyss	318'240	6'366	108'413	109'374	175'032	7'200	718'259
Andreas Thiel	318'240	6'366	108'413	109'374	174'477	0	710'504
Daniel Ammann	318'240	6'366	108'413	109'374	174'532	0	710'559
Roland Jud[5]	310'284	6'207	105'705	106'640	158'581	0	681'210
Total	**1'731'756**	**31'671**	**539'357**	**766'844**	**886'730**	**15'177**	**3'939'864**

[1]) Options granted in 2019 for performance of 2018. The fair value of the options is CHF 17.03 per option at grant date. Strike price: CHF 78.95, Vesting date: January 1, 2022; Expiry date: January 1, 2025.
[2]) Bonus paid out in 2019 for performance of 2018.
[3]) Mandatory social insurance paid on the base salary, bonus and on the fair value of options when granted.
[4]) Company car and child and education allowance.
[5]) Mr. Jud has a 97.5% working time contract.

Compensation for the members of the Executive Committee 2017

	Base Salary	Number of Options	Value of Options[1]	Bonus[2]	Pension and Social insurance funds[3]	Other benefits[4]	Total Compensation
	CHF		CHF	CHF	CHF	CHF	CHF
Thomas Seiler, CEO	457'600	6'829	298'018	412'237	223'733	9'521	1'401'109
Jean-Pierre Wyss	312'000	6'829	298'018	151'831	160'416	2'000	924'265
Andreas Thiel	312'000	6'829	298'018	151'831	160'384	2'000	924'233
Daniel Ammann	312'000	6'829	298'018	151'831	160'404	2'000	924'253
Roland Jud[5]	304'200	6'658	290'555	148'035	156'881	0	899'671
Total	**1'697'800**	**33'974**	**1'482'627**	**1'015'765**	**861'818**	**15'521**	**5'073'531**

[1]) Options granted in 2018 for performance of 2017. The fair value of the options is CHF 43.64 per option at grant date. Strike price: CHF 191.55, Vesting date: January 1, 2021; Expiry date: January 1, 2024.
[2]) Bonus paid out in 2018 for performance of 2017.
[3]) Mandatory social insurance paid on the base salary, bonus and on the fair value of options when granted.
[4]) Company car, 15 and 20 year jubilee.
[5]) Mr. Jud has a 97.5% working time contract.

13.2.4 Other Compensations

Share allotment

No shares were allocated to the members of the Board of Directors or Executive Committee in 2018.

Additional fees, remunerations, guarantees and loans

No additional fee or remuneration was paid to the members or former members of the Board of Directors or Executive Committee in 2018.

No guarantees or loans were granted by a group company to the members of the Board of Directors or Executive Committee or were outstanding on December 31, 2018.

Persons closely linked

No remuneration, fees or loans were paid, respectively granted, to persons closely linked to members of the Board of Directors or Executive Committee in 2018. Persons closely linked are defined as (i) a spouse or partner, (ii) children, (iii) any legal entities that they own or otherwise control, or (iv) any legal or natural person who is acting as their fiduciary.

Report of the Statutory Auditor

To the General Meeting of Shareholders of u-blox Holding AG, Thalwil

We have audited the accompanying compensation report of u-blox Holding AG for the year ended December 31, 2018. The audit was limited to the information according to articles 14 - 16 of the Ordinance against Excessive compensation in Stock Exchange Listed Companies contained in paragraph 13.2 of the compensation report 2018 on pages 24 to 26.

Responsibility of the Board of Directors

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

Auditor's Responsibility

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

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

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

Opinion

In our opinion, the compensation report for the year ended December 31, 2018 of u-blox Holding AG complies with Swiss law and articles 14 – 16 of the Ordinance.

KPMG AG

Daniel Haas
Licensed Audit Expert
Auditor in Charge

Nicole Charrière Roos
Licensed Audit Expert

Lucerne, March 14, 2019

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Consolidated statement of financial position

(in CHF 000s)	Note	At December 31, 2018	At December 31, 2017
Assets			
Current assets			
Cash and cash equivalents	6	136'296	169'624
Marketable securities	7	1'401	2'813
Trade accounts receivables	8	60'802	50'401
Other receivables		11'197	9'616
Current tax assets		1'574	3'328
Inventories	9	57'486	44'204
Prepaid expenses and accrued income		7'685	3'176
Derivative financial assets		473	152
Total current assets		**276'914**	**283'314**
Non-current assets			
Property, plant and equipment	10	14'829	17'494
Goodwill	11	55'231	57'628
Intangible assets	11	193'445	153'986
Other financial assets		1'063	1'141
Equity-accounted investees	12	7'978	7'210
Deferred tax assets	24	3'570	3'739
Total non-current assets		**276'116**	**241'198**
Total assets		**553'030**	**524'512**
Liabilities and equity			
Current liabilities			
Trade accounts payables	13	21'562	20'296
Other payables		7'206	6'625
Current tax liabilities		3'200	5'767
Provisions	16	0	150
Accrued expenses	14	23'508	26'108
Total current liabilities		**55'476**	**58'946**
Non-current liabilities			
Financial liabilities	15	119'165	118'913
Other payables		56	534
Provisions	16	6'948	8'248
Pension liability	17	17'958	15'851
Deferred tax liabilities	24	4'472	3'149
Non-current tax liabilities		78	359
Total non-current liabilities		**148'677**	**147'054**
Total liabilities		**204'153**	**206'000**
Shareholders' equity			
Share capital	18	6'390	6'261
Share premium	18	66'296	66'579
Treasury shares		-32'031	-24'422
Cumulative translation differences		-14'225	-10'204
Retained earnings		322'447	280'298
Total equity, attributable to owners of the parent		**348'877**	**318'512**
Total liabilities and equity		**553'030**	**524'512**

These consolidated financial statements should be read in conjunction with the accompanying notes.

Consolidated income statement

(in CHF 000s)	Note	For the year ended December 31, 2018	For the year ended December 31, 2017
Revenue	5	**393'269**	**403'712**
Cost of sales		-216'151	-219'695
Gross profit		**177'118**	**184'017**
Distribution and marketing expenses		-36'966	-36'173
Research and development expenses	21	-74'925	-65'554
General and administrative expenses		-20'755	-19'125
Other income		3'818	1'921
Operating profit		**48'290**	**65'086**
Finance income	23	5'305	5'668
Finance costs	23	-2'158	-5'652
Share of loss of equity-accounted investees, net of taxes	12	-3'339	-400
Profit before income tax (EBT)		**48'098**	**64'702**
Income tax expense	24	-9'617	-13'442
Net profit		**38'481**	**51'260**
Basic earnings per share (in CHF)	19	5.58	7.42
Diluted earnings per share (in CHF)	19	5.56	7.34

Consolidated statement of comprehensive income

(in CHF 000s)	Note	For the year ended December 31, 2018	For the year ended December 31, 2017
Net profit		**38'481**	**51'260**
Other comprehensive income			
Remeasurements on pension liability	17	-974	-607
Income tax on remeasurements on pension liability	24	213	119
Items that will not be reclassified to income statement		**-761**	**-488**
Currency translation differences		-4'021	4'814
Items that are or may be reclassified subsequently to income statement		**-4'021**	**4'814**
Other comprehensive income, net of taxes		**-4'782**	**4'326**
Total comprehensive income, attributable to owners of the parent		**33'699**	**55'586**

These consolidated financial statements should be read in conjunction with the accompanying notes.

Consolidated statement of changes in equity

(in CHF 000s)	Note	Share capital	Share premium	Treasury shares	Cumulative translation differences	Retained earnings	Total equity, attributable to owners of the parent
Balance at January 1, 2017		**6'152**	**74'387**	**0**	**-15'018**	**219'206**	**284'727**
Net profit for the period		0	0	0	0	51'260	51'260
Other comprehensive income for the period, net of taxes		0	0	0	4'814	-488	4'326
Total comprehensive income		*0*	*0*	*0*	*4'814*	*50'772*	*55'586*
Share-based payments[1)]	20/24	0	0	0	0	10'320	10'320
Purchase of treasury shares		0	0	-24'422	0	0	-24'422
Dividend out of share premium		0	-14'526	0	0	0	-14'526
Options exercised during the year, net of transaction costs	20	109	6'718	0	0	0	6'827
Total transactions with owners of the parent		*109*	*-7'808*	*-24'422*	*0*	*10'320*	*-21'801*
Balance at December 31, 2017		**6'261**	**66'579**	**-24'422**	**-10'204**	**280'298**	**318'512**
Net profit for the period		0	0	0	0	38'481	38'481
Other comprehensive income for the period, net of taxes		0	0	0	-4'021	-761	-4'782
Total comprehensive income		*0*	*0*	*0*	*-4'021*	*37'720*	*33'699*
Share-based payments[1)]	20/24	0	0	0	0	4'429	4'429
Purchase of treasury shares		0	0	-7'609	0	0	-7'609
Dividend out of share premium		0	-15'441	0	0	0	-15'441
Options exercised during the year, net of transaction costs	20	129	15'158	0	0	0	15'287
Total transactions with owners of the parent		*129*	*-283*	*-7'609*	*0*	*4'429*	*-3'334*
Balance at December 31, 2018		**6'390**	**66'296**	**-32'031**	**-14'225**	**322'447**	**348'877**

1) Represents the amount of stock option expense of CHF 8.43 million (2017: CHF 7.96 million) including respective tax effects of CHF -4.00 million (2017: CHF 2.36 million) recognized for 2018 and 2017 respectively.

For further information on share capital and share premium see note 18.

Approximately CHF 3.4 million (2017: CHF 3.4 million) of the share premium and retained earnings is not available for distribution due to legal restrictions.

These consolidated financial statements should be read in conjunction with the accompanying notes.

Consolidated statement of cash flows

(in CHF 000s)	Note	For the year ended December 31, 2018	For the year ended December 31, 2017
Net profit		**38'481**	**51'260**
Adjustments for:			
Depreciation	10	9'303	9'268
Amortization	11	14'053	12'894
Impairment of intangible assets	11	0	128
Share-based payment transactions	20	8'431	7'959
Change of pension liability		1'135	1'508
Other non-cash transactions		184	953
Change of allowance for doubtful receivables		64	136
Finance income	23	-5'305	-5'668
Finance costs	23	2'158	5'652
Share of loss of equity accounted investees		3'339	400
Income tax expense	24	9'617	13'442
Change in trade and other receivables, prepaid expenses and accrued income		-16'614	-12'931
Change in inventories	9	-13'282	-12'633
Change in trade and other payables and accrued expenses		-889	4'923
Change in provisions		-1'450	2'646
Income tax paid		-12'883	-19'433
Net cash generated from operating activities		**36'342**	**60'504**
Acquisition of property, plant and equipment	10	-7'319	-10'586
Acquisition of intangible assets	11	-54'075	-54'519
Proceeds from disposal of property, plant and equipment	10	7	38
Proceeds from disposal of intangible assets	11	0	148
Proceeds from sale of marketable securities		1'400	5'195
Acquisition of financial assets		-20	-140
Proceeds from disposal of financial assets		91	73
Acquisition of marketable securities		0	-500
Participation in a capital increase in an associate	12	-4'107	-3'560
Interest received		632	340
Net cash used in investing activities		**-63'391**	**-63'511**
Proceeds from exercise of options		15'286	6'827
Dividends paid to owners of the company		-15'441	-14'526
Proceeds from financial liabilities	15	0	59'284
Purchase of treasury shares		-7'609	-24'422
Interest paid		-1'917	-1'151
Net cash generated (used in)/from financing activities		**-9'681**	**26'012**
Net increase in cash and cash equivalents		**-36'730**	**23'005**
Cash and cash equivalents at beginning of year		169'624	149'545
Exchange gains/(losses) on cash and cash equivalents		3'402	-2'926
Cash and cash equivalents at end of year	6	**136'296**	**169'624**

These consolidated financial statements should be read in conjunction with the accompanying notes.

Notes to the consolidated financial statements

1 CORPORATE INFORMATION AND BASIS OF PREPARATION

u-blox Group ('u-blox' or the 'Group') consists of u-blox Holding AG ('the company' or 'the parent'), incorporated on September 21, 2007 in Thalwil, Switzerland, and its consolidated subsidiaries (together "the Group entities"). u-blox Holding AG was incorporated by a contribution in kind of all shares of u-blox AG in exchange for shares of the new holding company. The shares of u-blox Holding AG are listed on the Main Standard of the SIX Swiss Exchange.

u-blox' core activities comprise the development, manufacturing and marketing of products and services supporting GPS/GNSS satellite positioning systems. u-blox offers a range of GPS/GNSS positioning products, including satellite receiver chips and chipsets, receiver modules, receiver boards, antennas and smart antennas which are in use worldwide for navigation, automatic vehicle location, security, traffic control, location based services, timing and agriculture. Since 2009 u-blox offers also wireless products and services. In 2015 and 2014, u-blox expanded its wireless activities by acquisition into short range radio area. Hardware production is fully outsourced to external contractors.

Statement of compliance and basis of preparation of the consolidated financial statements

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) and comply with Swiss law. They have been prepared using the historical cost convention except for items requiring fair value accounting and for net defined benefit obligations, which are measured at fair value of plan assets less the present value of the defined benefit obligations. The consolidated financial statements are presented in Swiss Francs (CHF), rounded to the nearest thousand unless other-wise stated. Group entities prepare their individual financial statements using their functional currency, which was identified to be the respective local currency.

The preparation of financial statements in conformity with IFRS requires management to make judgments, estimates and assumptions that affect the application of policies and reported amounts of assets and liabilities, income and expenses as well as disclosure of contingent assets and liabilities. Although these judgments, estimates and assumptions are based on management's best knowledge of current events and actions, actual results may ultimately differ from those estimates. The estimated and underlying assumptions are reviewed on an ongoing basis, and revised if necessary, see note 3.

2 ACCOUNTING POLICIES

The principal accounting policies applied in the preparation of these consolidated financial statements are set out below. These policies have been consistently applied to all the years presented, unless otherwise stated.

Changes in accounting policy and disclosure

The Group has initially adopted IFRS 15 Revenue from Contracts with Customers and IFRS 9 Financial Instruments from January 01, 2018. A number of other new standards are effective from January 01, 2018 but they do not have a material effect on the Group's financial statements.

IFRS 15 Revenue from Contracts with Customers

IFRS 15 establishes a comprehensive framework for determining whether, how much and when revenue is recognized. It replaced IAS 18 Revenue, IAS 11 Construction Contracts and related interpretations.

The Group has adopted IFRS 15 using the cumulative effect method, which requires the Group to recognize any effect resulting from initially applying this standard at the date of initial application, i.e. January 01, 2018. The information presented for 2017 has not been restated – i.e. it is presented as previously reported under IAS 18, IAS 11 and related interpretations.

The shift from the risk-and reward approach under IAS 18 to the transfer-of-control approach under IFRS 15 did not result in a difference in the timing and amount of revenue recognition. The initial application of IFRS 15 did not result in a material impact, which is why the Group has not adjusted retained earnings as of January 01, 2018.

The application of IFRS 15 resulted in adjustments to the accounting policies in order to align the wording with IFRS 15 and in an increase in disclosures in the notes to the consolidated financial statements.

IFRS 9 Financial instruments

IFRS 9 Financial Instruments sets out requirements for recognizing and measuring financial assets, financial liabilities and some contracts to buy or sell non-financial items. This standard replaces IAS 39 Financial Instruments: Recognition and Measurement. The Group will take advantage of the exemption allowing it not to restate comparative information for prior periods with respect to classification and measurement (including impairment) changes. Differences in the carrying amounts of financial assets and financial liabilities resulting from the adoption of IFRS 9 will generally be recognized in retained earnings and reserves as at January 01, 2018.

Classification – Financial assets
IFRS 9 contains a new classification and measurement approach for financial assets that reflects the business model in which assets are managed and their cash flow characteristics. IFRS 9 contains three principal classification categories for financial assets: measured at amortized cost, FVOCI and FVTPL. The standard eliminates the existing IAS 39 categories of held to maturity, loans and receivables and available for sale. Under IFRS 9, derivatives embedded in contracts where the host is a financial asset in the scope of the standard are never bifurcated. Instead, the hybrid financial instrument as a whole is assessed for classification.

The implementation of the IFRS 9 classification requirements did not have a material impact, see note 25.

Impairment – Financial assets and contract assets
IFRS 9 replaces the 'incurred loss' model in IAS 39 with a forward-looking expected credit loss (ECL) model. This will require considerable judgement about how changes in economic factors affect ECLs, which will be determined on a probability-weighted basis.

The new impairment model is described in the accounting policies.

Based on this methodology, the application of the impairment requirements of IFRS 9 as per January 01, 2018 did result in no material additional impairment losses, which is why the Group has not adjusted retained earnings as of January 01, 2018.

The application of IFRS 9 resulted in adjustments to the accounting policies and in an increase in disclosures in the notes to the consolidated financial statements.

New IFRSs issued but not yet effective in 2018
The following new and revised standards and interpretations, which are or may be applicable to u-blox, have been issued, but are not yet effective and are not applied early in these consolidated financial statements:

Standard/Interpretation		Impact	Effective date	Planned application by u-blox
New Standards and Interpretations				
IFRS 16	Leases	3)	January 1, 2019	Reporting year 2019
IFRIC 23	Uncertainty over Income Tax Treatments	1)	January 1, 2019	Reporting year 2019
Revisions and amendments of Standards and Interpretations				
Annual Improvements to IFRS Standards 2014 – 2016 Cycle				
	Long-term interests in associates and joint ventures	1)	January 1, 2019	Reporting year 2019
Annual Improvements to IFRS Standards 2015 – 2017 Cycle				
	Amendments to IFRS 3 Business Combinations and IFRS 11 Joint Arrangements	1)	January 1, 2019	Reporting year 2019
	Amendments to IAS 12 Income Tax	1)	January 1, 2019	Reporting year 2019
	Amendments to IAS 23 Borrowing Costs	1)	January 1, 2019	Reporting year 2019
Amendments to References to Conceptual Framework in IFRS Standards		3)	January 1, 2020	Reporting year 2020
Definition of a Business (Amendments to IFRS 3)		3)	January 1, 2020	Reporting year 2020
Definition of Material (Amendments to IAS 1 and IAS 8)		3)	January 1, 2020	Reporting year 2020

[1] No significant impacts are expected on the consolidated financial statements of u-blox.
[2] Mainly additional disclosures are expected in the consolidated financial statements of u-blox.
[3] The impact on the consolidated financial statements of u-blox cannot yet be determined with sufficient reliability.

IFRS 16 Leasing
The Group is required to adopt IFRS 16 Leases from January 1, 2019. IFRS 16 introduces a single, on-balance-sheet lease accounting model for lessees. A lessee recognizes a right-of -asset representing its right to use the underlying asset and a lease liability representing its obligation to make lease payments. There are optional exemptions for short-term leases and leases of low value items. IFRS 16 replaces the previous leases standard, IAS 17 Leases, and related interpretations.

The Group will apply IFRS 16 initially on January 1, 2019, using the modified retrospective approach. Therefore, the cumulative effect of adopting IFRS 16 will be recognized as an adjustment to the opening balance of retained earnings at January 1, 2019, with no restatement of comparative information. The Group will mainly recognize new assets and liabilities for its operating leases of offices and cars. The nature of expenses related to those leases will now change as the Group will recognize a depreciation charge for right-of-use assets and interest expense on lease liabilities instead of other operating expenses.

The Group has assessed the impact that initial application of IFRS 16 will have on its consolidated financial statements, as described on qualitative basis above. The quantification of the impact of IFRS 16 as of January 1, 2019 involves significant judgement such as the determination of the expected lease term, which is still ongoing. In addition the Group has not yet finalized the testing and assessment of the underlying data of all lease contracts existing on January 1, 2019 used by its Lease Accounting Tool to measure the relevant financial statements captions. Consequently, the impact of IFRS 16 will be disclosed in its interim consolidated financial statements 2019.

Principles of consolidation
The consolidated financial statements include the financial statements of u-blox Holding AG, which provides holding functions, and its subsidiaries, the following entities at December 31, 2018 and 2017:

Company	Share capital (million)	Ownership interest Dec. 31, 2018	Ownership interest Dec. 31, 2017	Function
u-blox AG, CH-Thalwil	CHF 4.23	100%	100%	E
u-blox Europe Ltd., UK-Charing	GBP 0.06	100%	100%	I
u-blox Asia Pacific Ltd., HK-Hong-Kong	USD 0.10	100%	100%	M
u-blox America Inc., US-Reston	USD 0.10	100%	100%	S
u-blox Singapore Pte. Ltd., SG-Singapore	SGD 0.10	100%	100%	M
u-blox Japan K.K., JP-Tokyo	JPY 10.00	100%	100%	M
u-blox Italia S.p.A., IT-Sgonico	EUR 0.40	100%	100%	E
u-blox UK Ltd., UK-Reigate	GBP 0.00	100%	100%	D
u-blox San Diego Inc., US-San Diego	USD 0.00	100%	100%	D
u-blox Melbourn Ltd., UK-Melbourn	GBP 0.14	100%	100%	D
u-blox Espoo Oy, FI-Espoo (former Fastrax)	EUR 0.05	100%	100%	E
u-blox Luton Ltd., UK-Luton	GBP 0.00	100%	100%	D
u-blox Lahore (Private) Ltd., PK-Lahore	PKR 14.11	100%	100%	D
u-blox Cork Ltd., IE-Cork	EUR 0.00	100%	100%	D
u-blox Malmö AB, SE-Malmö (former connectBlue)	SEK 0.83	100%	100%	E
u-blox Athens S.A., GR-Athen (former Antcor)	EUR 0.18	100%	100%	D
u-blox Berlin GmbH, DE-Berlin	EUR 0.03	100%	100%	D
Sapcorda Services GmbH, DE-Berlin	EUR 0.03	42.96%	42.96%	D
u-blox Wireless Technology (Shanghai) Ltd.	USD 0.02	100%	100%	D
u-blox Electronics (Shanghai)	USD 0.02	100%	-	D

E = Engineering, Logistics, Marketing, Sales and Support. | S = Sales and Support. | M = Marketing. | D = Engineering. | I = Inactive.

Subsidiaries are all entities that u-blox Holding AG has the ability to control. u-blox Holding AG controls an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is obtained by the Group. When the Group loses control over a subsidiary, it derecognises the assets and liabilities of the subsidiary, and any related NCI and other components of equity. Any resulting gain or loss is recognized in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

The Group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the fair value of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration arrangement. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured initially at their fair values at the acquisition date. The Group recognizes any non-controlling interest in the acquiree on an acquisition-by-acquisition basis, either at fair value or at the non-controlling interest's proportionate share of the recognized amounts of acquiree's identifiable net assets. Acquisition- related costs are expensed as incurred.

Any contingent consideration to be transferred by the Group is recognized at fair value at the acquisition date. If the contingent consideration is classified as equity, then it is not re-measured, and its subsequent settlement is accounted for within equity. Otherwise, subsequent changes in the fair value of the contingent consideration are recognized in the financial result.

Goodwill is initially measured as the excess of the aggregate of the consideration transferred over the net identifiable assets acquired and liabilities assumed. If this consideration is lower than the fair value of the net assets of the subsidiary acquired, the difference is recognized in profit or loss.

The Group's interests in equity-accounted investees comprise interests in associates. Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. Interests in associates are accounted for using the equity method. They are initially recognized at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group's share of the profit or loss of equity-accounted investees, until the data on which significant influence ceases.

Intercompany transactions, balances, income and expenses on transactions between Group companies are eliminated. Profits and losses resulting from intercompany transactions that are recognized in assets are also eliminated. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Foreign currency translation
Transactions in foreign currencies are translated to the respective functional currencies of Group entities at transaction date exchange rates. Any difference in exchange rates between the original transaction date and the subsequent settlement date is recorded in the income statement as a gain or loss. Monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at year-end rates and related unrealized gains and losses are presented in the income statement within finance income or costs. Non-monetary assets and liabilities denominated in foreign currencies are translated to the functional currency at the exchange rate prevailing at the date of the transaction.

The Group uses CHF as its presentation currency, which is the functional currency of the parent. Group entities prepare their individual financial statements using their functional currency, being the currency of the primary economic environment in which the entity operates.

The results and financial position of all the Group entities (none of which has the currency of a hyper-inflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

a) assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet;
b) income and expenses for each income statement are translated at average exchange rates (unless this average is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the rate on the dates of the transactions); and
c) all resulting exchange differences are recognized in other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of a foreign entity are treated as assets and liabilities of the foreign entity and translated at the closing rate. Exchange differences arising are recognized in other comprehensive income. When a foreign operation is disposed of, in part or in full, the related accumulated translation difference included in equity is transferred to profit or loss. Translation differences on long-term loans to foreign operations that in substance form part of the net investment in the foreign operation are also classified as equity until disposal of the net investment.

Upon disposal of the net investment, all related cumulative translation differences are recognized in the income statement.

The following rates were used to translate the financial statements of the Group's entities into CHF for consolidation purposes:

	December 31, 2018		December 31, 2017	
	Average rate	Closing rate	Average rate	Closing rate
EUR	1.15493	1.12874	1.11161	1.16842
USD	0.97809	0.98370	0.98437	0.97380
GBP	1.30535	1.25284	1.26807	1.31608
HKD	0.12480	0.12560	0.12633	0.12462
SGD	0.72503	0.72177	0.71304	0.72818
CNY	0.14801	0.14301	0.14569	0.14921
JPY	0.00886	0.00897	0.00878	0.00864
PKR	0.00808	0.00703	0.00935	0.00881
SEK	0.11260	0.11106	0.11535	0.11898

Cash and cash equivalents
Cash and cash equivalents are stated at nominal value. They include cash on hand, bank accounts and fixed-term deposits or call deposits with original terms of less than 3 months.

Marketable securities
Marketable securities include investments in bonds denominated in CHF are classified at fair value through profit or loss. Financial assets carried at fair value through profit or loss are initially recognized at fair value, and transaction costs are expensed in the income statement. Marketable securities are derecognized when the rights to receive cash flows from the investments have expired or have been transferred and the Group has transferred substantially all risks and rewards of ownership.

Trade accounts receivables and other receivables
Trade accounts receivables and other receivables are recognized initially at fair value and subsequently measured at amortized cost, less loss allowances. In accordance with the provisions of IFRS 9 the loss allowance on trade accounts receivables and other receivables is calculated using the 'expected credit loss' (ECL) model. See section impairment of financial assets. In 2017 a loss allowance in accordance with IAS 39 was recorded if there was an objective indication, such as insolvency of a counterparty, that the amounts due in respect of such accounts cannot be recovered in full. The allowance was measured as the difference between the carrying amount of the receivable and expected future cash flows ('incurred loss' model).

Inventories
Inventories consist principally of purchased raw materials, work in progress and finished products which are stated at the lower of cost and net realizable value. Net realizable value is the estimated selling price less the estimated cost of completion and selling expenses. Raw materials consist of components which are assembled by external contractors into finished products. The cost of all inventories is based on the weighted average cost principle and includes costs incurred in acquiring the inventory and bringing it to its present location and condition. It excludes overheads and borrowing costs. Allowances are made for slow-moving items. Obsolete items are written off.

Property, plant and equipment
Property, plant and equipment is stated at acquisition cost less accumulated depreciation and impairment losses. Depreciation is calculated on a straight-line basis over the following useful lives:

	Estimated useful life (years)
Furniture, equipment and vehicles	2–6
IT infrastructure	2–5
Tools and test infrastructure	2–5

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. The carrying amount of the replaced part is derecognized. All other repairs and maintenance are charged to the income statement during the financial period in which they are incurred.

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period. An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than it's estimated recoverable amount. At the time of disposal, items of property, plant and equipment are eliminated from the statement of financial position. Any gains or losses on disposal are recognized in the income statement as a component of other income and expenses.

Goodwill
The Group measures goodwill at the acquisition date of business combinations as:
- the fair value of the consideration transferred, plus
- the recognized amount of any non-controlling interests in the acquiree, less
- the net recognized amount of the identifiable assets acquired and liabilities assumed.

For the purpose of impairment testing, goodwill acquired in a business combination is allocated to each of the Cash Generating Units (CGUs), or Groups of CGUs, that is expected to benefit from the synergies of the combination. Each unit or Group of units to which the goodwill is allocated represents the lowest level within the entity at which the goodwill is monitored for internal management purposes. Goodwill is monitored at the operating segment level. Goodwill impairment reviews are undertaken annually or more frequently if events or changes in circumstances indicate a potential impairment. The carrying value of goodwill is compared to the recoverable amount, which is the higher of value in use and the fair value less costs of disposal. Any impairment is recognized immediately as an expense and is not subsequently reversed.

Intangible assets
Intangible assets are stated at acquisition cost or in the case of intellectual property rights, technology and customer relationships acquired in a business combination at fair value less related accumulated amortization and impairment losses. Amortization is calculated on a straight-line basis over the following useful lives:

	Estimated useful life (years)
Intellectual property rights/acquired technology	2–5
Software	2–5
Capitalized development costs	2–5
Customer relationships/other intangible assets	2–5

Intangible assets with finite useful lives are amortized over their estimated useful lives as stated above.

Capitalized development costs
Development activities involve a plan or design for the production of new or substantially improved products and services. Development expenditures are capitalized if they can be measured reliably, the product or service is technically and commercially feasible, future economic benefits are probable, and the Group intends to and has sufficient resources to complete development and to use or sell the asset. The expenditures capitalized include the cost of materials as well as direct labour and overhead costs that are directly attributable to preparing the asset for its intended use.

The Group expenses research and development costs incurred in the preliminary project stage. To the extent that research and development costs include the development of embedded software, the Group believes that software development is an integral part of the semiconductor design. Therefore, such costs are expensed as incurred until technological feasibility has been established. Thereafter, any additional development costs are capitalized.

Expenditures for research activities undertaken with the prospect of gaining new scientific or technical knowledge and understanding, are expensed in profit or loss when incurred. Development costs previously recognized as an expense are not recognized as an asset in a subsequent period.

Capitalized development costs are measured at cost less accumulated amortization and accumulated impairment losses. Amortization starts if the asset (or a part of it) is in use or when the product is released to customers.

Impairment of property, plant and equipment and intangible assets
The carrying amounts of the Group's property, plant and equipment and intangible assets are reviewed at each annual balance sheet date or earlier if a significant event has occurred to determine whether there is any indication of impairment. If any such indication exists, an impairment test is performed. Goodwill and capitalized development costs not yet available for use are tested for impairment at least every year.

An impairment loss is recognized in the income statement whenever the carrying amount of an asset or Cash Generating Unit exceeds its recoverable amount. Recoverable amount is the higher of fair value less cost of disposal and the asset's or cash generating unit's value in use. In assessing value in use, the estimated future cash flows are discounted to their present value based on the risks specific to the asset(s).

An impairment loss is reversed if there is an indication that the impairment loss may no longer exist and there has been a change in the estimates used to determine the recoverable amount.

Other financial assets
Other financial assets primarily consist of rent deposits for offices and loans. These deposits and loans bear interest at current market rates and are stated at amortized cost, which approximates their fair value. Exchange rate gains and losses on other financial assets are recorded in the income statement. Impairments in value of other financial assets are expensed in the income statement, see section "impairment of financial assets".

Impairment of financial asset
The IFRS 9 impairment model applies to financial assets measured at amortized cost or FVOCI, except for investments in equity instruments. Under IFRS 9, loss allowances will be measured on either of the following bases:
- 12-month ECLs: these are ECLs that result from possible default events within the 12 months after the reporting date; and
- lifetime ECLs: these are ECLs that result from all possible default events over the expected life of a financial instrument.

Lifetime ECL measurement applies if the credit risk of a financial asset at the reporting date has increased significantly since initial recognition and 12-month ECL measurement applies if it has not. An entity may determine that a financial asset's credit risk has not increased significantly if the asset has low credit risk at the reporting date. However, lifetime ECL measurement always applies for trade accounts receivables without a significant financing component; the Group has chosen to apply this policy also for trade receivables with a significant financing component.

The group calculated ECLs based on actual credit loss experience over the past three years or based on external counterparty credit ratings.

Trade and other payables
Trade payables are obligations to pay for goods or services that have been acquired in the ordinary course of business from suppliers. Other payables include other obligations including contingent payments to former shareholders of acquired subsidiaries. Accounts payables are classified as current liabilities if payment is due within one year or less. If not, they are presented as non-current liabilities. Trade payables and other payables are recognized initially at fair value and subsequently measured at amortized cost using the effective interest method.

Financial liabilities
Interest-bearing loans and borrowings are recognized initially at fair value less attributable transaction costs. Subsequent to initial recognition, interest-bearing loans and borrowings are measured at amortized cost with any difference between cost and redemption value recognized in the income statement over the period of the borrowings using the effective interest method. Interest-bearing loans and borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months subsequent to the balance sheet date.

Provisions
A provision is recognized when the Group has a legal or constructive obligation as a result of a past event and it is probable that an outflow of economic benefits will be required to settle the obligation. Provisions are measured at the present value of the expenditures expected to be required to settle the obligation using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to passage of time is recognized as interest expense.

Leases
Lease agreements in which the Group assumes substantially all the risks and rewards of ownership are classified as finance leases. Other leases represent operating leases for which the leased assets are not recognized on the Group's statement of financial position. Operating lease payments are recognized in the income statement on a straight line basis over the term of the lease.

Employee benefits
a) Pension obligations
The Group maintains pension plans for employees located in Switzerland, the United Kingdom (UK), Italy, Japan, Sweden, Greece, Belgium, Ireland, Finland, the United States of America (USA), Singapore, Pakistan and China. These plans comply with the respective legislation in each country and are financially independent of the Group. The funds are generally financed by employer and employee contributions.

The plans in the UK, partly in Italy, Belgium, Ireland, Sweden, the USA, Pakistan, China and Singapore qualify as defined contribution plans since the Group has no further payment obligations once the fixed contributions have been paid. Employer contributions paid or due are recognized in the income statement as incurred. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available.
The plan in Switzerland is contracted with an insurance company and qualifies as defined benefit plan. The part of the Italian TFR (Trattamento di fine rapporto) which has vested before December 31, 2006 and the Greek plan also qualify as defined benefit plans.

The net liability (asset) recognized in the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of any plan assets. The defined benefit obligation is calculated annually and separately for each defined benefit plan by independent qualified actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation.

The Group determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit liability at the beginning of the annual period to the net defined benefit liability (asset).

Re-measurements arising from defined benefit plans comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest). The Group recognizes them immediately in other comprehensive income and all other expenses related to defined benefit plans in employee benefit expenses and finance cost respectively.

When the benefits of a plan are changed, or when a plan is curtailed, the portion of the changed benefit related to past service by employees, or the gain or loss on curtailment, is recognized immediately in profit or loss when the plan amendment or curtailment occurs.

The Group recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs. The gain or loss on a settlement is the difference between the present value of the defined benefit obligation being settled as determined on the date of settlement and the settlement price, including any plan assets transferred and any payments made directly by the Group in connection with the settlement.

Surpluses are only capitalized if they are actually available to the Group in the form of expected refunds from the fund or reductions in contributions to the fund.

b) Profit-sharing and bonus plans
The Group recognizes a liability and an expense for bonuses and profit-sharing, either based on a formula that takes into consideration sales and earnings before interest and taxes (EBIT) attributable to the company's shareholders or a formula based on gross margin improvement in comparison to local costs. The Group recognizes an accrual where contractually obliged or where there is a past practice that has created a constructive obligation.

Income taxes
The tax expense for the period comprises current and deferred tax. Tax is recognized in the income statement, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively.

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the company and its subsidiaries operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax is recognized, using the balance sheet liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred tax liabilities are not recognized if they arise from the initial recognition of goodwill; deferred income tax is not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit or loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantively enacted by the balance sheet date and are expected to apply when the related deferred income tax asset is realized or the deferred income tax liability is settled.

Deferred tax assets on tax loss carry forwards and deductible temporary differences are recognized only to the extent that it is probable that future profits will be available to utilize the deferred tax asset. Deferred income tax is provided on temporary differences arising on investments in subsidiaries, except for deferred income tax liability where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future. 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 assets and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to settle the balances on a net basis.

Share-based payments
The Group operates equity-settled, share-based compensation plans, under which the entity receives services from employees as consideration for equity instruments (options and shares) of the Group. The fair value of the employee services received in exchange for the grant of the equity instruments is based on a binomial model for options and on the listed share price for shares, respectively, and is recognized as an expense with the counter-entry recognized in equity. The total amount to be expensed is determined by reference to the fair value of the equity instruments granted, excluding the impact of any service and non-market performance vesting conditions.

Non-market performance and service conditions are included in assumptions about the number of equity instruments that are expected to vest. The total expense is recognized over the vesting period, which is the period over which all of the specified vesting conditions are to be satisfied.

At the end of each reporting period, the Group revises its estimates of the number of equity instruments that are expected to vest based on the service and non-market vesting conditions. It recognizes the impact of the revision to original estimates, if any, in the income statement, with a corresponding adjustment to equity. When the options are exercised, the company issues new shares. The proceeds received net of any directly attributable transaction costs are credited to share capital (nominal value) and share premium.

Revenue recognition
Revenue is measured based on the consideration specified in a contract with a customer and excludes amounts collected on behalf of third parties. Under IFRS 15, the Group recognizes revenue when it transfers control over a good to a customer. In 2017 revenue was recognized in accordance with the provisions of IAS 18 when the significant risk and rewards of ownership had been transferred.

The Group sells standardized positioning and wireless products generally via purchase orders to customers (i.e. end customers and distributors). In general, customers obtain control of the goods when they are dispatched from the Group's warehouse. Invoices are generated and revenue is recognized at that point in time. Invoices are usually payable within 30 days. Contracts with customers may contain variable consideration such as volume rebates. Variable consideration are generally not constrained as the Group has experience with these type of contracts and it is not probable that a significant reversal in the amount of revenue recognized will occur once the uncertainty associated with the variable consideration is resolved.

Contracts include a standard warranty clause to guarantee that the products comply with agreed specifications.

Financial instruments
Financial instruments comprise cash and cash equivalents, trade accounts receivables and parts of other receivables, loans and borrowings, marketable securities, accrued income, derivative financial instruments, accrued expenses and trade and parts of other payables. These financial instruments are recognized initially at fair value. Subsequent measurement is at amortized cost except for marketable securities, derivative financial instruments and liabilities for contingent considerations which are subsequently measured at fair value through profit or loss.

Share capital
Incremental costs directly attributable to issue ordinary shares and share options are recognized as a deduction from equity.

3 CRITICAL ACCOUNTING JUDGMENTS AND ESTIMATES

The preparation of consolidated financial statements is dependent upon estimates and assumptions being made in applying the accounting policies for which management can exercise a certain degree of judgment. In applying the relevant accounting policies to the consolidated financial statements, certain assumptions and estimates have to be made about the future that may have a material influence on the amount and presentation of assets and liabilities, revenues and expenses as well as note disclosure information. The estimates used in preparing the consolidated financial statements and valuations are based on empirical values and other factors which are deemed appropriate in the given circumstances.

The following estimates used and assumptions made in applying the accounting policies have a critical influence on the consolidated financial statements.

Decription	Judgemental decisions and estimation insecurity	Further information
Impairment of intangible assets	Intangible assets not yet available for use are tested for impairment annually. Intangible assets in use are assessed for impairment when there is a triggering event providing evidence that such assets may be impaired. Assess whether an impairment exists, estimates of expected future cash flows – including estimated growth rates, discount rates and estimated useful life – are used.	Note 11
Impairment of goodwill	Key assumptions such as projected cash flows, the discount rate (WACC) and long-term growth rate for determination of recoverable amount.	Note 11
Provisions	A number of third parties in the wireless sector protect and enforce their intellectual property rights. Relying on third party technology that is integrated into some of the Group's product carries the risk of having to pay royalties for such technology. Defendant in royalty- and warranty-related proceedings incidental to the ordinary course of business. Estimates of outcome and financial effect, probability of occurrence and of expected cash outflow.	Note 16
Pension liability	Assumptions such as discount rates, life expectance and pension growth increases are required to calculate the present value of the respective defined benefit obligation. These estimates and assumptions used are based on future projections.	Note 17

4 CHANGES IN SCOPE OF CONSOLIDATION

In 2018 and 2017 no business combination took place.

In 2017 u-blox entered into an arrangement with three other partners which resulted in the loss of control over Sapcorda Services GmbH (Sapcorda), please refer to note 12.

5 SEGMENT REPORTING

In accordance with the management structure and the reporting made to the Board of Directors (the Group's Chief Operating Decision Maker, which is the Board of Directors of u-blox Holding AG), the reportable segments are the two operating Corporate Groups 'Positioning and Wireless products' and 'Wireless services'. Segment accounting is prepared up to the level of Operating Profit (EBIT) because this is the key figure used for management purposes. No distinction is made between the accounting policies of segment reporting and those of the consolidated financial statements. No operating segments were aggregated.

The following reportable segments were identified:

Positioning and Wireless products
The Group develops and distributes GPS/GNSS positioning receivers and wireless communication modules which are mainly used in automotive, industrial and consumer applications. Products are marketed and sold by the u-blox worldwide sales organization. The products are manufactured by third parties. The Group coordinates the whole supply chain and manages the world-wide production and distribution of the products.

Wireless services
Since the acquisitions of u-blox Italia S.p.A. and u-blox San Diego, Inc., u-blox offers also services in the wireless communication technology which forms a separate business segment as these products consist of delivery of reference designs and software.

Segment information at December 31

	Positioning and Wireless products		Wireless services		Total segments		Non-allocated/ eliminations		Group	
(in CHF 000s)	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Revenue third	393'000	403'510	269	202	393'269	403'712	0	0	393'269	403'712
Revenue IntraGroup	0	0	31'178	32'600	31'178	32'600	-31'178	-32'600	0	0
Total Revenue	**393'000**	**403'510**	**31'447**	**32'802**	**424'447**	**436'312**	**-31'178**	**-32'600**	**393'269**	**403'712**
EBITDA	68'616	84'720	3'098	2'894	71'714	87'614	-68	-238	71'646	87'376
Depreciation	-6'650	-6'709	-2'653	-2'559	-9'303	-9'268	0	0	-9'303	-9'268
Amortization	-14'023	-12'852	-30	-42	-14'053	-12'894	0	0	-14'053	-12'894
Impairment	0	-128	0	0	0	-128	0	0	0	-128
Operating profit (EBIT)	**47'943**	**65'031**	**415**	**293**	**48'358**	**65'324**	**-68**	**-238**	**48'290**	**65'086**
Finance income									5'305	5'668
Finance costs									-2'158	-5'652
Share of loss of equity-accounted investees, net of taxes									-3'339	-400
EBT									**48'098**	**64'702**

Revenues are derived from:

(in CHF 000s)	For the year ended December 31, 2018	For the year ended December 31, 2017
Sale of goods	390'248	399'424
Services rendered	259	217
License fees	197	622
Revenue from contracts with customers	**390'704**	**400'263**
Other revenues	2'565	3'449
Total	**393'269**	**403'712**

Geographic information
u-blox in Switzerland is the main decision making body and bears the associated business risks. For reasons of maintaining a market presence in proximity to the customers, marketing and sales are managed by three regional managers, respectively. However, resource allocation to these regions is not meaningful as the regional staff is mainly acting as representative of u-blox and regional managers are not part of the management of u-blox. Furthermore most of the businesses are developed on a global base with partners of our customers involved in various geographic regions.

The following table summarizes revenue by geographic region based on customers' location:

	For the year ended December 31, 2018		For the year ended December 31, 2017	
	in CHF 000s	**% share**	**in CHF 000s**	**% share**
EMEA	128'880	32.8	105'293	26.1
thereof: Switzerland	1'896	0.5	1'642	0.4
Germany	30'614	7.8	27'341	6.8
America	84'098	21.4	91'060	22.6
thereof: United States of America	77'087	19.6	79'904	19.8
Asia Pacific	180'291	45.8	207'359	51.4
thereof: China	99'261	25.2	132'486	32.8
Total	**393'269**	**100.0**	**403'712**	**100.0**

The following table summarizes property, plant and equipment, intangible assets and goodwill by geographic region as allocated:

	For the year ended December 31, 2018		For the year ended December 31, 2017	
	in CHF 000s	**% share**	**in CHF 000s**	**% share**
EMEA	259'318	98.4	224'760	98.1
thereof: Switzerland	190'564	72.3	149'836	65.4
UK	21'295	8.1	21'845	9.5
Italy	14'518	5.5	15'888	6.9
Sweden	14'081	5.3	16'893	7.4
Finland	9'597	3.6	9'829	4.3
Germany	4'217	1.6	5'116	2.2
America	3'032	1.2	3'070	1.3
Asia Pacific	1'155	0.4	1'278	0.6
Total	**263'505**	**100.0**	**229'108**	**100.0**

Revenue by market
(in CHF 000s)

	For the year ended December 31, 2018	For the year ended December 31, 2017
Automotive	112'233	102'155
Consumer	40'201	48'122
Industrial	225'094	232'118
Others	13'176	17'868
Total	**390'704**	**400'263**

Revenue by product type
(in CHF 000s)

	For the year ended December 31, 2018	For the year ended December 31, 2017
Module	290'000	290'900
Chips	95'508	102'594
Others	5'196	6'769
Total	**390'704**	**400'263**

The Group applies the practical expedient in paragraph 121 of IFRS 15 and does not disclose information about remaining performance obligations that have original expected durations of one year or less.

6 CASH AND CASH EQUIVALENTS

(in CHF 000s)	At December 31, 2018	At December 31, 2017
Petty cash	50	25
Cash at banks	70'375	46'346
Call and fixed-term deposits	65'871	123'253
Total	**136'296**	**169'624**
Composition of cash and cash equivalents by currency (in CHF 000s)		
CHF	48'951	8'058
USD	74'808	143'360
EUR	9'119	11'435
Other	3'418	6'771

7 MARKETABLE SECURITIES

In November 2009, u-blox entered into an asset management agreement with Zürcher Kantonalbank to invest in CHF bonds. This amount is being increased or decreased at least on an annual basis, based on the cash requirements of the Group. The interest received on the investments is reinvested. The rating of the debtors of the bonds which may be invested into have to meet highest credit ratings at purchase date, see note 25. The agreement can be terminated with immediate effect.

8 TRADE ACCOUNTS RECEIVABLES

(in CHF 000s)	At December 31, 2018	At December 31, 2017
Gross amount	61'465	51'009
Loss allowance	-663	-608
Total	**60'802**	**50'401**
Composition by currency (in CHF 000s)		
USD	53'385	44'310
EUR	7'783	6'390
JPY	297	309
Composition by regions (in CHF 000s)		
EMEA	16'069	12'435
Americas	25'464	20'479
Asia Pacific	19'932	18'095

Trade accounts receivables by region are based on customer billing location.

9 INVENTORIES

(in CHF 000s)	At December 31, 2018	At December 31, 2017
Raw material (components)	30'720	18'731
Work in progress	7'294	9'028
Finished products	19'472	16'445
Total	**57'486**	**44'204**

Components and changes in finished products recognized as cost of sales amounted to CHF 203.6 million (2017: CHF 208.0 million).

In addition, inventories have been reduced by TCHF 979 (2017: TCHF 2'837) as a result of the write-down to net realizable value. This write-down was recognized as an expense during 2018. The write-down are included in cost of sales.

10 PROPERTY, PLANT AND EQUIPMENT

Cost (in CHF 000s)	**Furniture, equipment and vehicles**	**IT infra-structure**	**Tools and test infra-structure**	**Total**
Balance at January 1, 2017	**27'844**	**2'468**	**23'994**	**54'306**
Addition	4'037	508	6'041	10'586
Disposal	-385	-43	-62	-490
Change in scope of consolidation	-9	-27	-17	-53
Reclassification within the Group*	-13'773	77	13'696	0
Translation differences	1'156	44	252	1'452
Balance at December 31, 2017	**18'870**	**3'027**	**43'904**	**65'801**
Additions	1'571	891	4'857	7'319
Disposal	-107	-22	-93	-222
Translation differences	-613	-149	-689	-1'451
Balance at December 31, 2018	**19'721**	**3'747**	**47'979**	**71'447**

Accumulated depreciation (in CHF 000s)	**Furniture, equipment and vehicles**	**IT infra-structure**	**Tools and test infra-structure**	**Total**
Balance at January 1, 2017	**19'103**	**1'546**	**17'883**	**38'532**
Depreciation	4'380	542	4'346	9'268
Disposal	-347	-69	-2	-418
Change in scope of consolidation	0	-4	-1	-5
Reclassification within the Group*	-9'634	156	9'478	0
Translation differences	724	26	180	930
Balance at December 31, 2017	**14'226**	**2'197**	**31'884**	**48'307**
Depreciation	1'905	582	6'816	9'303
Disposal	-100	-22	-93	-215
Translation differences	-417	-92	-268	-777
Balance at December 31, 2018	**15'614**	**2'665**	**38'339**	**56'618**
Net carrying amount at January 1, 2017	**8'741**	**922**	**6'111**	**15'774**
Net carrying amount at December 31, 2017	**4'644**	**830**	**12'020**	**17'494**
Net carrying amount at December 31, 2018	**4'107**	**1'082**	**9'640**	**14'829**

* During 2017 lab material were newly allocated from furniture, equipment and vehicles to tools and test infrastructure.

The Group did not have any capital commitments at December 31, 2018 (December 31, 2017: none).

Depreciation for the year is recorded in the following income statement positions:

(in CHF 000s)	**2018**	**2017**
Cost of sales	3'210	2'726
Distribution and marketing expenses	99	116
Research and development expenses	5'479	5'813
General and administrative expenses	515	613
Total depreciation	**9'303**	**9'268**

11 GOODWIL AND INTANGIBLE ASSETS

Cost (in CHF 000s)	**Goodwill**	Intellectual property rights/ acquired technology	Software	Capitalized development costs	Customer relation-ships/ other intan-gible assets	**Total intangible assets**
Balance at January 1, 2017	**54'104**	**55'084**	**13'214**	**125'699**	**5'583**	**199'581**
Additions	0	177	525	53'817[1)]	0	54'519
Disposal	0	0	-85	0	-4	-89
Change in scope of consolidation	0	0	-7	0	0	-7
Translation differences	3'524	1'050	221	70	235	1'576
Balance at December 31, 2017	**57'628**	**56'311**	**13'868**	**179'586**	**5'814**	**255'580**
Additions	0	0	278	53'797[1)]	0	54'075
Disposal	0	0	0	0	-6	-6
Translation differences	-2'397	-908	-192	-58	-235	-1'393
Balance at December 31, 2018	**55'231**	**55'403**	**13'954**	**233'325**	**5'573**	**308'255**

Accumulated amortization and impairment losses (in CHF 000s)	**Goodwill**	Intellectual property rights/ acquired technology	Software	Capitalized development costs	Customer relation-ships/ other intan-gible assets	**Total intangible assets**
Balance at January 1, 2017	**0**	**31'711**	**11'203**	**40'563**	**4'198**	**87'675**
Amortization	0	3'930	1'016	7'383	565	12'894
Disposal	0	0	0	128	0	128
Impairment	0	0	-16	0	-4	-20
Translation differences	0	408	293	55	160	916
Balance at December 31, 2017	**0**	**36'049**	**12'496**	**48'129**	**4'919**	**101'593**
Amortization	0	3'273	977	9'245	558	14'053
Disposal	0	0	0	0	-6	-6
Reclassification within the Group	0	-564	0	564	0	0
Translation differences	0	-403	-186	-49	-192	-830
Balance at December 31, 2018	**0**	**38'355**	**13'287**	**57'889**	**5'279**	**114'810**
Net carrying amount at January 1, 2017	**54'104**	**23'373**	**2'011**	**85'136**	**1'385**	**111'905**
Net carrying amount at December 31, 2017	**57'628**	**20'262**	**1'372**	**131'457**	**895**	**153'986**
Net carrying amount at December 31, 2018	**55'231**	**17'048**	**667**	**175'436**	**294**	**193'445**

[1)] The capital development costs consists of internally developed costs.

During 2018 no impairment losses on capitalized development cost (2017: CHF 0.1 million) were recognized on intangible assets. The Group did not have any capital commitments at December 31, 2018 (December 31, 2017: none).

Amortization for the year is recorded in the following income statement positions:

(in CHF 000s)	**2018**	**2017**
Cost of sales	52	68
Distribution and marketing expenses	553	561
Research and development expenses	13'303	12'097
General and administrative expenses	145	168
Total amortization	**14'053**	**12'894**

The impairment in 2017 is recorded in the income statement position research and development expenses.

Goodwill
Goodwill has been allocated to the Group's Cash Generating Units ("CGU") which are identical to the Group's reportable segments as follows:

(in CHF 000s)	At December 31, 2018	At December 31, 2017
Positioning and Wireless products	54'360	56'726
Wireless services	871	902
Total goodwill	**55'231**	**57'628**

Impairment
The Group of intangible assets of each CGU, including allocated goodwill, is tested for impairment at least annually. The value in use is thereby determined based on future discounted cash flows. As a basis for the calculation, the four-year mid-term plan is used. Subsequent years are included using a perpetual annuity. The projections are based on knowledge and experience and also on judgments made by management as to the probable economic development. Consequently, it is assumed that for all CGUs, there are no planned significant changes in their organization. The underlying projections for the next four years are therefore calculated based on historical figures and the latest market estimates. Pre-tax discount rates were applied in determining the recoverable amount of the units. The discount rates were estimated based on an industry weighted average cost of capital.

Following parameters have been used for the calculations:

	Pre tax discount rate	Post tax discount rate	2018 Growth rate (residual value)	Pre tax discount rate	Post tax discount rate	2017 Growth rate (residual value)
Positioning and Wireless products	10.21%	8.66%	3%	10.63%	9.15%	3%
Wireless services	10.84%	8.65%	3%	11.56%	9.14%	3%

The growth rate does not exceed the long-term average growth rate for the industry.

The estimated recoverable amount of the CGU exceeded its carrying amount by approximately CHF 89.9 million for the Positioning and Wireless products and CHF 1.2 million for the Wireless services. Management has identified that a reasonably possible change in two key assumptions could cause the carrying amount to exceed the recoverable amount. The following tables show the amount by which these two assumptions would need to change individually for the estimated recoverable amount to be equal to the carrying amount.

Sensitivity analysis for goodwill related to:

Positioning and Wireless products

	Change required for carrying amount to equal recoverable amount 2018
Discount rate	1.3%
Growth rate (residual value)	-2.0%

Wireless services

	Change required for carrying amount to equal recoverable amount 2018
Discount rate	0.6%
Growth rate (residual value)	-0.9%

12 EQUITY ACCOUNTED INVESTEES

In 2017 u-blox entered into an arrangement with three other partners which resulted in the loss of control over Sapcorda Services GmbH (Sapcorda). In a first step, the 100% share of Sapcorda was deconsolidated. The gain from this transaction amounts to TCHF 5'384 and was recognized in the financial income. Thereof TCHF 2'250 are attributable to the remeasurement of the retained interest. In a second step, the 42.96% of the shares remaining with u-blox were recognized as an equity-accounted investee.

u-blox and three other partners created Sapcorda Services GmbH to bring high precision GNSS positioning services to mass market applications. The four parties recognized that existing solutions for GNSS positioning services do not meet the needs of emerging high precision GNSS mass markets.

Sapcorda will offer globally available GNSS positioning services via internet and satellite broadcast and will enable accurate GNSS positioning at centimeter level. The services are designed to serve high volume automotive, industrial and consumer markets. The real time correction data service will be delivered in a public, open format and is not bound to receiver hardware or systems.

The following table shows the reconciliation of movements of equity-accounted Investees in 2018.

(in CHF 000s)	2018	2017
Balance at January 1,	**7'210**	**0**
Fair value of retained interest	0	2'250
Capital increase[1]	4'107	5'360
Share of net results	-3'339	-400
Balance at December 31,	**7'978**	**7'210**

[1)] Cash outflow amounts to TCHF 4'107 (2017: TCHF 3'560).

In 2017 the consideration received from the Sapcorda transaction was TEUR 2'500 (TCHF 2'987), whereof nothing was paid in cash or cash equivalents.

Selected key performance indicators for equity-accounted investees:

(in CHF 000s)	2018	2017
Income statement		
Total expenses	-7'770	-1'545
Net profit	**-7'770**	**-1'545**
Balance sheet at December 31		
Current assets	17'936	7'774
Non-current assets	4'580	5'184
Total assets	**22'516**	**12'958**
Liabilities	1'672	2'950
Equity	20'844	10'008
Total liabilities and equity	**22'516**	**12'958**

13 TRADE ACCOUNTS PAYABLES

(in CHF 000s)	At December 31, 2018	At December 31, 2017
Trade accounts payables	21'562	20'296
Total	**21'562**	**20'296**
Composition by currency (in CHF 000s)		
CHF	685	419
USD	19'476	17'804
EUR	613	1'821
Other	788	252

14 ACCRUED EXPENSES

(in CHF 000s)	At December 31, 2018	At December 31, 2017
Personnel related	11'392	14'374
Other accruals	12'116	11'734
Total	**23'508**	**26'108**
Thereof classified as financial instruments (note 25)	11'952	11'734

Accrued expenses include accruals for personnel expenses (such as bonus, social security, etc.) as well as licenses, insurances, warranties, lawyer and administration services.

15 FINANCIAL LIABILITIES

The following table shows the reconciliation of movements of liabilities to cash flows arising from financing activities.

(in CHF 000s)	Liabilities 2018	Liabilities 2017
Balance at January 1,	**118'913**	**59'414**
Changes from financing cash flows		
Proceeds from loans and borrowings	0	59'284
Total changes from financing cash flows	**0**	**118'698**
Other changes		
Change in accruals	0	-591
Interest paid	-1'812	-975
Interest expenses	2'064	1'781
Balance at December 31,	**119'165**	**118'913**

At April 18, 2017, u-blox issued a bond for CHF 60.0 million (net cash inflow of CHF 59.3 million) with a coupon of 1.375% p.a. and a term to maturity of 6 years.

At April 23, 2015, u-blox issued a bond for CHF 60.0 million (net cash inflow of CHF 59.2 million) with a coupon of 1.625% p.a. and a term to maturity of 6 years.

16 PROVISIONS

(in CHF 000s)	current provisions	Royalties	Other	Total non-current provisions	Total provisions
At January 1, 2017	1'611	4'850	37	4'887	6'498
Used	0	0	0	0	0
Additions	0	3'363	0	3'363	3'363
Release	-1'454	0	0	0	-1'454
Translation differences	-7	0	-2	-2	-9
At December 31, 2017	**150**	**8'213**	**35**	**8'248**	**8'398**
Used	0	-930	0	-930	-930
Additions	0	2'319	0	2'319	2'319
Release	-150	-2'689	0	-2'689	-2'839
Translation differences	0	0	0	0	0
At December 31, 2018	**0**	**6'913**	**35**	**6'948**	**6'948**

u-blox products are designed to conform to certain wireless industry standards which are based on certain patented technologies. A provision for royalty payments is recorded which is estimated to be due to these patent holders once the license agreements are concluded with them. The provision is based on absolute amounts, and on a percentage of individual product revenues and is recorded at the time revenue is recognized. Should the actual royalties to be paid under license agreements signed in the future differ from the estimates, the royalty provision would have to be revised. The provisions for royalties are considered to have a duration of more than one year and therefore are classified as non-current. Provisions are recorded based on the best estimate of future probable economic outflow. Management believes that these provisions are sufficient.

17 PENSION LIABILITY

The Group maintains defined benefit plans in Switzerland, Greece and Italy and defined contribution plans in the United Kingdom (UK), in the United States of America (USA), Italy, Sweden, Belgium, Ireland, Finland, Japan, Singapore, Pakistan and China. These plans comply with prevailing legal requirements to cover the majority of employees in the event of death, disability and retirement. The plans are financed by employer and employee contributions in compliance with local legal and fiscal regulations.

17.1 Defined benefit plans

The most material plans are in Switzerland, accounting for 99% of u-blox entire defined benefit obligation and 100% of the plan assets.

17.2 Switzerland

The Swiss pension plans are governed by the Swiss Federal Law on Occupational Retirement, Survivors' and Disability Pension Plans (BVG), which stipulates that pension plans are to be managed by independent, legally autonomous units. The assets of the pension plan are held within a separate foundation and cannot revert to the employer. Pension plans are overseen by a regulator as well as by a state supervisory body.

u-blox participates in two "Sammelstiftungen", which are a collective foundations administrating the pension plans of various unrelated employers. The pension plans of u-blox are fully segregated from the ones of other participating employers. One collective foundation bears longevity risk, but has reinsured the investment and other demographic risks with an insurance company. The other collective foundation bears the investment risk, but has no longevity risks.

The most senior governing body of the collective foundation is the Board of Trustees, which is also ultimately responsible for the investment strategy and policy, taking into account the foundation's objectives, benefit obligations (i.e. asset-liability management) and risk capacity. The Board of Trustees has delegated the implementation of the investment policy to an Investment Committee. The benefit-related operations are managed by a life insurance, which is also re-insuring the risks described below. The segregated pension plan of u-blox is administered by a Parity Pension Committee, which is composed of equal numbers of employees and employer representatives. All governing and administration bodies have an obligation to act in the interests of the plan participants.

Plan participants, their spouse and children are insured against the financial consequences of old age, disability and death. Their benefits are defined in pension plan rules compliant with the BVG, which is specifying the minimum benefits that are to be provided. Retirement benefits are based on the accumulated retirement capital which can either be drawn as a life-long annuity or as a lump sum payment. The annuity is calculated by multiplying the retirement capital with the currently applicable conversion rate. The accumulated retirement capital is made of the yearly contributions towards the old age risk by both employer and employee and the interest thereon until retirement. Contributions towards the old age risk are approved by the Parity Pension Committee, based on the rules defined by the Board of Trustees of the collective foundation. Minimum contributions and interest are defined by the BVG and the Swiss Parliament. In 2018 the minimum interest was 1.0% (2017: 1.0%). Employer and employee are also making contributions towards the disability and death risks; the corresponding benefits are defined based on the current salary and fully re-insured with a life-insurance. The pension fund has concluded an insurance contract with Helvetia that covers death benefits, disability benefits and old age pensions. The pension fund is the policy holder and the beneficiary of the contract. If the applicable tariff of the insurance company results in a lower old age pension than the old age pension according to the plan rules, the pension fund has to finance this difference by buying a further pension amount within the insurance company.

The benefit plan was replaced as of October, 2014 by two benefit plans. These benefit Plans differentiate one from another by the definition of the insured salary, by which the salaries higher than CHF 150'000 have now for the insured salary, a ceiling of 4.5 times the maximum AHV Pension.

As of October 1, 2014 a third Plan was introduced to cover the salary that will not be insured anymore by the Sammelstiftung Swisscanto and will be now insured by Pensflex. This plan also provides benefits in the event of retirement, death, or disability. The plan benefits are based on age, years of service, salary and on an individual old age account. The plan is funded by assets held within a separate independent legal entity. The plan is financed by contributions paid by the employees and by the employer. This new Plan will only pay at retirement the accumulated old-age account. This plan considers the free choice of investment strategy for the individual accounts and three savings model. Given the free choice for the investment strategy, there is no guarantee of interest rate to be allocated to these accounts.

In 2018, the Board of Trustees made following amendment in the Swiss pension plan:
The pension Fund VZ has in place flexible conversion rates for the non-mandatory part of the old-age accounts; these might be reviewed every year. The mandatory pension remains guaranteed. During the year 2018, the conversion rates were amended for the year 2019 5.13%/5.13% (2018: 5.3%/5.3%) for the non-mandatory part at age 65/64 (M/F). Overall these changes resulted in a past service credit of TCHF 346.
In case of an underfunding of the pension plan measured based on its Swiss GAAP FER financial statements, various measures can be taken such as increasing current contributions of both employer and employee or decreasing the interest on the retirement capital.

Movement in net defined benefit liability
The following table shows a reconciliation from the opening balances to the closing balances for the net defined benefit liability and its components. The movements in the table below represent mainly the Swiss plan. The unfunded Italian and Greek plans are also included but have no significant impact on the movements.

	Defined benefit obligation		**Fair value of plan assets**		**Net defined benefit liability**	
(in CHF 000s)	**2018**	**2017**	**2018**	**2017**	**2018**	**2017**
Balance at January 1	69'639	56'127	-53'788	-42'410	15'851	13'717
Included in income statement						
Current service cost	4'157	3'870	0	0	4'157	3'870
Plan amendments	-346	-26	0	0	-346	-26
Interest cost / (income)	569	440	-458	-348	111	92
Administration cost	0	0	45	43	45	43
	4'380	**4'284**	**-413**	**-305**	**3'967**	**3'979**
Included in other comprehensive income						
Remeasurements loss / (gain): - Actuarial loss / (gain) arising from:						
- financial assumptions	-1'501	-445	0	0	-1'501	-445
- experience adjustments	-1'146	4'142	0	0	-1'146	4'142
- demographic assumptions	0	0	0	0	0	0
- return on plan assets excluding interest income	0	0	3'621	-3'090	3'621	-3'090
	-2'647	**3'697**	**3'621**	**-3'090**	**974**	**607**
Other						
Contributions by employer	0	0	-2'799	-2'485	-2'799	-2'485
Plan participants' contributions	1'786	1'582	-1'786	-1'582	0	0
Benefits received, net	2'320	3'916	-2'332	-3'916	-12	0
Exchange rate differences	-23	33	0	0	-23	33
	4'083	**5'531**	**-6'917**	**-7'983**	**-2'834**	**-2'452**
Balance at December 31	**75'455**	**69'639**	**-57'497**	**-53'788**	**17'958**	**15'851**
thereof: funded					**17'273**	**15'167**
unfunded (refers to the Italian and Greek pension plans)					**685**	**684**

The expected contribution of the Group for defined benefit plans for the financial year 2019 amounts to TCHF 2'842.

Principal actuarial assumptions (Swiss plan only)

Calculation of defined benefit obligations	At December 31, 2018	At December 31, 2017
Discount rate	0.95%	0.80%
Future pension indexations	0.25%	0.25%
Mortality table	BVG 2015G	BVG 2015G

At December 31, 2018, the weighted-average duration of the defined benefit obligation for the Swiss plan was 20.8 years (2017: 21.1 years).

Sensitivity analysis
The calculation of the defined benefit obligation is sensitive to significant actuarial assumptions. The impact of a change in the respective assumptions on the defined benefit obligation at the end of the reporting period would be as follows:

	2018	2017	2018	2017
Change	+0.25%	+0.25%	-0.25%	-0.25%
(in CHF 000s)				
Change of the discount rate	-2'298	-2'165	2'507	2'364
Pension growth	1'082	1'018	-1'035	-974
	-1 Year	-1 Year	+1 Year	+1 Year
Life expectance	-948	-871	943	867

The sensitivity analysis is based on realistically possible changes as of the end of the reporting period. Each change in a significant actuarial assumption was analyzed separately as part of the test. Interdependencies were not taken into account.

Asset classes (Swiss plan only)

Fair value of plan assets (CHF 000s)	2018	2017
Equities	15'305	15'613
Bonds	18'786	17'118
Real estate	3'666	3'654
Investment Funds	12'480	10'096
Non Traditional Funds (e.g. Hedge Funds)	3'204	1'783
Other	0	1'099
Cash	4'056	4'425
Total fair value of plan assets	**57'497**	**53'788**

All equity securities and bonds have quoted prices in active 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 in both developed and emerging markets.

17.3 Defined contribution plans
In 2018, Group contributions recognized as an expense for defined contribution plans were TCHF 3'853 (2017: TCHF 3'056).

18 SHARE CAPITAL AND SHARE PREMIUM

	Number of shares	Ordinary share capital CHF 000s	Share premium CHF 000s
At January 1, 2017	**6'835'094**	**6'152**	**74'387**
Dividends paid-out			-14'526
Options exercised during the year	122'076	109	6'718
At December 31, 2017	**6'957'170**	**6'261**	**66'579**
Dividends paid-out			-15'441
Options exercised during the year	142'687	129	15'158
At December 31, 2018	**7'099'857**	**6'390**	**66'296**

Ordinary share capital
The company's ordinary share capital at December 31, 2018 consists of 7'099'857 registered shares with a nominal value of CHF 0.90 each. Dividends per share of CHF 2.25 were paid out in 2018 (2017: CHF 2.10). Transaction costs related to the options exercised in 2018 amounting to TCHF 271 have been netted off with the deemed proceeds and recorded in share premium.

Authorized share capital
The Board of Directors is authorized, at any time until April 30, 2019, to increase the share capital through the issuance of up to 1'018'000 fully paid-in registered shares with a nominal value of CHF 0.90 each in an aggregate amount not to exceed CHF 916'200.

Conditional share capital
At the ordinary shareholders' meeting held on April 25, 2017, the shareholders resolved that the Board of Directors shall be authorized to increase the share capital by a maximum aggregate amount of CHF 178'292 by issuing no more than 198'102 fully paid-in registered shares with a nominal value of CHF 0.90. The conditional share capital is used for the exercise of option rights that are and will be granted to the members of the Board of Directors and to the employees of the company and its subsidiaries according to any employee share option plans (ESOP) as approved by the Board of Directors. In 2018, 142'687 options were exercised out of the conditional share capital (2017: 122'076) and therefore newly issued shares of 137'450. The conditional share capital amount available decreased accordingly to CHF 97'404 (108'227 shares with a nominal value of CHF 0.90).

Treasury shares
In 2018 u-blox purchased 53'000 treasury shares (2017: 125'000) at the average purchase price of CHF 143.55 (2017: CHF 195.38) per share.

19 EARNINGS PER SHARE

Basic earnings per share are calculated by dividing the net profit attributable to the equity holders of u-blox Holding AG by the weighted average number of shares outstanding during the year. In the case of diluted earnings per share, the weighted average number of shares outstanding is adjusted assuming all outstanding dilutive options will be exercised. The weighted average number of shares is adjusted for all dilutive options issued under the stock option plans which have been granted.

	For the year ended December 31, 2018	For the year ended December 31, 2017
Net profit (in CHF 000s)	**38'481**	**51'260**
Weighted average number of outstanding shares (basic)	**6'897'533**	**6'912'763**
Effect of share options on issue	25'711	67'972
Weighted average number of outstanding shares (diluted)	**6'923'244**	**6'980'735**
Basic earnings per share (in CHF)	**5.58**	**7.42**
Diluted earnings per share (in CHF)	**5.56**	**7.34**

At December 31, 2018 the Group had 692'846 outstanding options (December 31, 2017: 660'375 outstanding options) granted to employees. See note 20.

20 EMPLOYEE COMPENSATION AND BENEFITS

Personnel expenses
Personnel expenses included in operating expenses consist of the following:

(in CHF 000s)	For the year ended December 31, 2018	For the year ended December 31, 2017
Salaries	45'096	39'794
Share-based payments	8'431	7'959
Social taxes	12'197	11'346
Pension cost	7'820	7'035
Other personnel related expenses	4'702	4'357
Total personnel expenses	**78'246**	**70'491**

Employee stock option plan
Employees of the Group are entitled to receive options under a stock option plan with a vesting period of three years and an option period of 6 years. The exercise price is determined by the Board of Directors. For US, Belgium and Finland residents, the exercise price equals the closing price of the share on the SIX Swiss Exchange on the granting date. For all other employees, the exercise price is the volume weighted average share price of the company on the SIX Swiss Exchange during the thirty trading days preceding and including the granting date or the closing price of the share on the SIX Swiss Exchange on the grant date. One option grants the right to purchase one u-blox Holding AG share.

In 2018, 173'762 options were granted to certain members of the Board of Directors, Executive Committee members and employees at an exercise price of CHF 191.55 and 41'278 employee stock options at an exercise price of CHF 191.80.

In 2017, 170'603 options were granted to certain members of the Board of Directors, Executive Committee members at an exercise price of CHF 187.09 and 61'479 employees stock options at an exercise price of CHF 191.20.

In 2018, 142'687 options were exercised to buy one share with a nominal value of CHF 0.90 at a share price of CHF 25.50, 39.15, 59.29, 96.15, 136.72 and 137.40 per option respectively. Share transaction costs of TCHF 271 were deducted from the proceeds. Net proceeds were recorded in share capital TCHF 129 and share premium TCHF 15'158.

In 2017, 122'076 options were exercised to buy one share with a nominal value of CHF 0.90 at a share price of CHF 25.50, 39.15, 39.91, 41.20, 59.29, 96.15, 136.72, 187.09 and 210.28 per option respectively. Share transaction costs of TCHF 236 were deducted from the proceeds. Net proceeds were recorded in share capital TCHF 109 and share premium TCHF 6'718.

The following table details the movements of outstanding employee stock options:

	For the year ended December 31, 2018		For the year ended December 31, 2017	
	Weighted average exercise price in CHF	Number of options	Weighted average exercise price in CHF	Number of options
Opening balance	**167.46**	**660'375**	**136.74**	**578'939**
Granted	191.60	215'040	188.18	232'082
Exercised	109.06	-142'825	57.86	-122'076
Forfeited	195.61	-39'744	181.08	-28'570
Ending balance	**185.37**	**692'846**	**167.46**	**660'375**
Thereof vested and exercisable	124.98	106'618	54.04	63'392

The following table summarizes the employee stock options outstanding at December 31, 2018 and December 31, 2017 respectively:

Expiry date	Exercise Price CHF	Options outstanding at December 31, 2018	Options outstanding at December 31, 2017
2019	25.50	0	14'978
2019	39.15	0	854
2020	59.29	15'102	42'395
2020	96.15	2'219	5'165
2021	136.72	77'779	164'505
2021	137.40	11'518	22'075
2022	210.28	137'614	143'080
2022	214.50	41'141	47'317
2023	187.09	155'747	162'151
2023	191.20	49'254	57'855
2024	191.55	167'036	0
2024	191.80	35'436	0
Total	185.37	**692'846**	**660'375**
Weighted average remaining expected life at December 31,		2.20 years	2.34 years
Weighted average remaining contractual life at December 31,		3.70 years	3.83 years

The weighted average fair value of the outstanding options was CHF 43.92 (2017: CHF 41.39). The fair value of stock options granted is estimated at the date of grant using a binomial model, taking into account the terms and conditions upon which the options were granted. The following table lists the inputs to the valuation model applied at grant date and used for the consolidated financial statements ended December 31, 2018 and 2017 respectively:

	2018	2017
Dividend yield	1.15%	1.05%
Expected volatility	34.20%	33.40%
Risk-free interest rate	-0.19%	-0.37%
Expected life of option	4.50 years	4.50 years
Expected exit rate after vesting	3.00%	3.00%
Weighted average share price	CHF 191.60	CHF 188.18

For 2018 and 2017 the expected volatility was based on the historical volatility of the u-blox share.

The expense for employee services received is recognized over the vesting period. The expense from the employee stock option plan recognized in 2018 was TCHF 8'431 (2017: TCHF 7'959).

21 RESEARCH AND DEVELOPMENT

(in CHF 000s)	2018	2017
Research and development expenditures	56'144	47'516
Depreciation and amortization	18'781	17'910
Impairment	0	128
Total research and development expenses	**74'925**	**65'554**

22 OPERATING EXPENSES BY NATURE

(in CHF 000s)	Note	2018	2017
Material costs	9	203'626	208'022
Personnel expenses	20	78'246	70'491
Depreciation	10	9'303	9'268
Amortization and impairment	11	14'053	13'022
Travel- and representation expenses		6'699	6'519
Administration expenses		8'715	6'878
Marketing expenses		4'602	4'507
Rent expenses		6'067	5'877
Other expenses		17'486	15'963
Total		**348'797**	**340'547**

The position other expenses mainly consists of product development and software maintenance expenses.

23 FINANCE INCOME/FINANCE COSTS

(in CHF 000s)	2018	2017
Interest income	348	280
Gains on financial instruments at fair value	0	4
Foreign exchange gain	4'792	0
Other finance income[1)]	165	5'384
Finance income	**5'305**	**5'668**
Losses on financial instruments at fair value	-94	-189
Financial liabilities measured at amortized costs-interest expenses	-2'064	-1'781
Interest expenses	0	-167
Foreign exchange loss	0	-3'515
Finance costs	**-2'158**	**-5'652**
Total, net	**3'147**	**16**

All finance income and costs from financial assets and financial liabilities have been recognized in the income statement.

[1)] In 2017, other finance income include the deconsolidation effect from Sapcorda, see Note 12.

24 INCOME TAX EXPENSE

Income taxes can be analyzed as follows:

(in CHF 000s)	2018	2017
Current income taxes	11'921	11'396
Deferred income taxes	-2'304	2'046
Total income tax expense	**9'617**	**13'442**

The Group has operations in various locations, where differing tax laws and income tax rates apply. Consequently, the effective tax rate on consolidated income may vary from year to year, based on the source of earnings. The reconciliation between the effective income tax and the expected income tax based on the consolidated profit before income tax computed with the expected tax rate of the main operating company in Thalwil, is as follows:

	2018		2017	
	in %	in CHF 000s	in %	in CHF 000s
Profit before income tax		**48'098**		**64'702**
Income tax rate of u-blox AG, Thalwil	19.4		19.4	
Expected income tax expense		9'331		12'552
Effect of different tax rates		-1'117		1'850
Effect of non-tax-deductible expenses		1'102		337
Prior year adjustments		285		-343
R&D tax credits		0		-1'254
Tax loss carry forwards not recognized in current year		0		150
Witholding taxes (non recoverable)		5		0
Other		11		150
Effective income tax expense		**9'617**		**13'442**

Deferred tax assets and liabilities

Effects of temporary differences and tax loss carry forwards that give rise to significant components of deferred tax assets and deferred tax liabilities are as follows:

	At December 31, 2018		At December 31, 2017		
(in CHF 000s)	Deferred tax assets	Deferred tax liabilities	Deferred tax assets	Deferred tax liabilities	Change 2018
Trade accounts receivable (net)	93	1'532	69	1'154	-354
Inventory	0	3'241	0	2'271	-970
Property Plant and Equipment	37	56	52	75	4
Intangible assets	182	1'872	194	2'361	477
Other assets	0	349	0	196	-153
Pension	3'502	0	3'136	0	366
Accrued expenses personnel	544	0	841	0	-297
Other liabilities	808	923	668	356	-427
Provision	10	0	14	0	-4
Tax loss carry forwards	1'895	0	2'029	0	-134
Deferred tax assets/liabilities (gross)	**7'071**	**7'973**	**7'003**	**6'413**	**-1'492**
Netting	-3'501	-3'501	-3'264	-3'264	0
Deferred tax assets/liabilities (net)[1)]	**3'570**	**4'472**	**3'739**	**3'149**	**-1'492**

[1)] The deferred tax assets/liabilities are calculated at the respective closing date rate whereas the changes in temporary differences are calculated at the average rate for the respective year.

In 2018, the cumulative remuneration expenses from share-based payments exceeds the amount of the tax deduction resulting from share-based payments. The subsequent reduction in the excess in the amount of CHF 4.00 million was recognized directly in equity. In 2017, the excess of the deferred tax of CHF 2.36 million was recorded in equity. In 2018, deferred income taxes in the amount TCHF 213 (2017: TCHF 119) were recognized in the other comprehensive income relating to the remeasurement of the pension liability.

25 FINANCIAL RISK MANAGEMENT

The following table shows the carrying amount of all financial instruments per category. They correspond, approximately, to the fair values in accordance with IFRS.

(in CHF 000s)	For the year ended December 31, 2018	For the year ended December 31, 2017
Cash and cash equivalents	**136'296**	**169'624**
Trade accounts receivables	60'802	50'401
Other receivables	352	9'616
Accrued income	769	769
Other financial assets	1'063	1'141
Financial assets at amortized costs[1)]	**62'986**	**61'927**
Marketable securities	1'401	2'813
Derivative financial assets	473	152
Financial assets at fair value through profit or loss	**1'874**	**2'965**
Trade accounts payables	21'562	20'296
Other payables	6'556	5'894
Accrued expenses	11'952	11'734
Financial liabilities	119'165	118'913
Liabilities at amortized costs	**159'235**	**156'837**
Other payables – contingent consideration	56	438
Liabilities at fair value through profit or loss	**56**	**438**

[1)] In 2017, according to the provisions of IAS 39 the financial assets in this category were classified as 'loans and receivables'. At the date of initial application of IFRS 9 the financial assets have been transferred to the measurement category 'financial assets at amortized cost'. The change in category did not have an impact on the measurement of the financial assets.

The carrying amount of the marketable securities recognized at their fair value is determined on the basis of the bonds prices at the balance sheet date. The contingent consideration contains the latest earn-out estimate in connection with the business combinations 2014. The earn-outs reflect the present value of the expected cash outflow which is measured on the basis of the achievement of profit goals defined in the corresponding purchase agreements.

Fair value hierarchy

The different levels of financial instruments carried at fair value or for which the fair value is disclosed have been defined as follows in the table below:

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 the liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices).

Level 3: inputs for assets or liabilities that are not based on observable market data (unobservable inputs).

For the year ended December 31, 2018

	Carrying amounts	Fair value		
(in CHF 000s)	Total	Level 1	Level 2	Level 3
Marketable securities	1'401	1'401	0	0
Derivative financial assets	473	0	473	0
Total assets	**1'874**	**1'401**	**473**	**0**
Other payables – contingent consideration	56	0	0	56
Financial liabilities	119'165	118'140	0	0
Total liabilities	**119'221**	**118'140**	**0**	**56**

For the year ended December 31, 2017

(in CHF 000s)	Total	Level 1	Level 2	Level 3
Marketable securities	2'813	2'813	0	0
Derivative financial assets	152	0	152	0
Total assets	**2'965**	**2'813**	**152**	**0**
Other payables – contingent consideration	438	0	0	438
Financial liabilities	118'913	123'390	0	0
Total liabilities	**119'351**	**123'390**	**0**	**438**

There were no reclassifications between the various levels in 2018 and 2017. The Group has not disclosed the fair value for financial instruments such as trade accounts receivables and payables, because their carrying amounts are a reasonable approximation of fair value.

The following table shows a reconciliation from the beginning balances to the ending balances for fair value measurements in level 3 of the fair value hierarchy:

(in CHF 000s)	2018	2017
Balance at January 1,	438	751
Total gains for the period recognized in income statement	-382	-313
Balance at December 31,	**56**	**438**

Risk exposure
The Group has exposure to the following risks from its use of financial instruments:

a. credit risk
b. liquidity risk
c. market risk
c1) interest rate risk
c2) currency risk

This note presents information about the Group's exposure to each of the above risks, the Group's objectives, policies and processes for measuring and managing risk. Further quantitative disclosures are included throughout these consolidated financial statements.

The Board of Directors has overall responsibility for the establishment and oversight of the Group's risk management framework. The Group's risk management policies are established to identify and analyze the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group, through its training and management standards and procedures, aims to develop a disciplined and constructive control environment in which all employees understand their roles and obligations.

The Group Audit Committee oversees how management monitors compliance with the Group's risk management policies and procedures and reviews the adequacy of the risk management framework in relation to the risks faced by the Group. Internal reviews by the Group accountant assist the Group Audit Committee in its oversight role. Internally both regular and ad hoc reviews of risk management controls and procedures are affected.

a) Credit risk
Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's cash and cash equivalents, trade accounts receivables from customers and investment securities.

Trade accounts receivables
The Group's exposure to credit risk is influenced mainly by the individual characteristics of each customer. The demographics of the Group's customer base, including the default risk of the industry and country in which customers operate, has less of an influence on credit risk. In general, the Group minimizes part of the credit risk as far as possible by way of credit insurance or a requirement of customers to either guarantee their payment by Letter of Credit (L/C) or to make a payment in advance. Collections and payments are continuously monitored.

u-blox has a contract with the credit insurances company AXA. This agreement includes a coverage of 90% of the agreed credit line for each customer. For every new customers a credit test by AXA takes place and is granted by a defined credit line. As long as the u-blox customer outstanding invoices are within the agreed credit limits, AXA will cover 90% of the receivables in the case of a loss. Therefore the impairment of a loss can't be higher than 10% for all outstanding which are in the defined credit limits.

The Group applies the simplified approach which allows using an allowance matrix to measure the ECLs of trade account receivables. Under this approach, u-blox calculates historical loss rates based on days past due buckets. Loss rates are based on actual credit loss experience over the past three years. These rates are multiplied by scalar factors to reflect differences between economic conditions during the period over which the historical data has been collected, current conditions and the Group's view of economic conditions over the expected lives of the receivables.

The movement in the loss allowance in respect of trade accounts receivables during the year was as follows. Comparative amounts for 2017 represent the allowance account for impairment losses under IAS 39.

(in CHF 000s)	**2018**	**2017**
Balance at January 1,	**608**	443
Amounts written off	-72	-8
Net remeasurement of loss allowance	127	173
Balance at December 31,	**663**	**608**

The following table provides information about the exposure to credit risk and ECLs for trade accounts receivables.

December 31, 2018 (in TCHF)	**Weighted-average loss rate**	**Gross carrying amount**	**Loss allowance**	**Credit-impaired**
Current (not past due)	0.01%	41'239	-4	No
1–30 days past due	0.01%	13'249	-2	No
31–90 days past due	0.05%	3'185	-2	No
91–180 days past due	0.25%	314	-2	No
More than 180 days past due	18.78%	3'478	-653	Yes
Total		**61'465**	**-663**	

Comparative information under IAS 39
In 2017 the Group established an allowance for impairment in accordance with IAS 39 that represented its estimate of incurred losses in respect of trade and other receivables. The main components of this allowance was a specific loss component that related to individually significant exposures, and a collective loss component established for Groups of similar assets in respect of losses that have been incurred but not yet identified. The collective loss allowance was determined based on historical data of payment statistics for similar financial assets.

	For the year ended December 31, 2017	
(in CHF 000s)	**Gross receivables**	**Net receivables**
Not yet due	39'321	39'321
1 - 30 days overdue	10'022	10'022
31 - 90 days overdue	941	941
91 - 180 days overdue	2	2
More than 180 days overdue	723	115
Total	**51'009**	**50'401**

Trade accounts receivables which are not yet due are mainly receivables arising from long-term standing customer relationships. Based on past experiences, u-blox does not expect any significant defaults.

Cash and cash equivalents and marketable securities
The Group held cash at bank of TCHF 70'375 at December 31, 2018 (2017: TCHF 46'346). The major part of the Cash at bank is held in Switzerland with banks and financial institutions counterparties rated AAA to A according to Standard & Poor. A minor part of Cash at banks is held with banks and financial institutions abroad with ratings from AA to BB. Furthermore, the Group limits its exposure to credit risk by only investing in fixed time deposits and marketable securities such as Swiss Francs bonds or similar instruments with counterparties that have a credit rating of at least A+ from Standard & Poor's and A1 from Moody's. The maximum duration is limited to 4 years except for cash. Given these high credit ratings, management does not expect any counterparty to fail to meet its obligations.

Guarantees
The Group's policy is to provide financial guarantees only to wholly-owned subsidiaries. At December 31, 2018 no guarantees were outstanding (December 31, 2017: none).

The maximum credit risk on financial instruments corresponds to the carrying amounts of the individual financial assets. u-blox has not entered into any guarantees or similar obligations that would increase the risk over and above the carrying amounts.

The maximum credit risk as per the balance sheet date was as follows:

(in CHF 000s)	For the year ended December 31, 2018	For the year ended December 31, 2017
Total cash and cash equivalents	136'296	169'624
Marketable securities	1'401	2'813
Derivative financial assets	473	152
Total trade accounts receivable (net)	60'802	50'401
Total other receivables	352	9'616
Accrued income	769	769
Other financial assets	1'063	1'141
Total	**201'156**	**234'516**

b) Liquidity risk
Liquidity risk is the risk that the Group will not be able to meet its financial obligations as they fall due. The Group's approach to managing liquidity is to ensure, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions, without incurring unacceptable losses or risking damage to the Group's reputation.

The Group uses short-term forecasts, which assists it in monitoring cash flow requirements and optimizing its cash return on investments. Typically the Group ensures that it has sufficient cash on demand to meet expected operational expenses for a period of 60 days, including the servicing of financial obligations; this excludes the potential impact of extreme circumstances that cannot reasonably be predicted, such as natural disasters. In addition, the Group maintains the following lines of credit:

The Group has access to an undrawn CHF 40.0 million overdraft facility. Interest would be payable at the rate of 3% p.a. plus commission of 0.25% per quarter. The bank may adjust the interest rate in line with the market interest rates. Management considers that the Group is not exposed to any significant risks arising from not being able to meet the financial obligations at the end of the reporting period.

The following are the contractual maturities of financial liabilities:

For the year ended December 31, 2018 (in CHF 000s)	**Carrying amounts**	**Contractual cash flows**	up to 6 months	6 – 12 months	1 – 5 years	more than 5 years
Total trade accounts payables	21'562	21'562	21'562	0	0	0
Other payables	6'556	6'556	6'556	0	0	0
Other payables – contingent consideration	56	56	0	0	56	0
Accrued expenses	11'952	11'952	11'952	0	0	0
Financial liabilities	119'165	127'110	1'812	0	125'298	0
Total	**159'291**	**167'236**	**41'882**	**0**	**125'354**	**0**

For the year ended December 31, 2017 (in CHF 000s)	**Carrying amounts**	**Contractual cash flows**	up to 6 months	6 – 12 months	1 – 5 years	more than 5 years
Total trade accounts payables	20'296	20'296	20'296	0	0	0
Other payables	5'894	5'894	5'894	0	0	0
Other payables – contingent consideration	438	438	0	0	438	0
Accrued expenses	11'734	11'734	11'734	0	0	0
Financial liabilities	118'913	128'922	1'812	0	66'273	60'837
Total	**157'275**	**167'284**	**39'736**	**0**	**66'711**	**60'837**

c) Market risk

Market risk is the risk that changes in market prices, such as foreign exchange and interest rates will affect the Group's income or the value of its holdings of financial instruments. The objective of market risk management is to manage and control market risk exposures within acceptable parameters, while optimizing the return.

c1) Interest rate risk

Interest rate risk arises from movements in interest rates which could have adverse effects on the Group's net income or financial position.

- The cash position is used for general corporate purposes and to fund the planned growth. The Group places a part of its cash and cash equivalents in marketable securities. Interest rate risk exposure exists for the invested assets as the fair value of the bonds depend on the actual interest rates. The risk is limited by investing in bonds of a maximum remaining duration of 4 years.
- In 2017, the Group entered into an interest rate swap with a maturity of 6 years, which exchanges fixed-rate payments for floating-rate payments based on LIBOR. The interest rate swap increases the Group's exposure to fluctuations in market interest rates. The underlying transaction is the bond of 2017.
- Revenue and operating cash flows are substantially independent of changes in market interest rates.

Management considers that the Group is not exposed to any significant risks arising from changes in market interest rates and therefore no hedging instruments are utilized.

An increase of the Swiss Franc interest rate of 0.25% would decrease the value of the marketable securities by 0.22% resulting in a negative impact of TCHF 3 on the net profit and equity. An increase of the Swiss Franc interest rate of 0.25% on the interest swap would result in a positive impact of TCHF 167 on the net profit and equity.

c2) Currency risk

Almost all of the revenue and cost of sales are denominated in USD or EUR. A majority of overhead and other fixed costs are denominated in CHF. This exposure to different currencies potentially results in gains or losses with respect to movements in foreign exchange rates and the impact of such fluctuations can be material. Accordingly, u-blox enters from time to time into economic hedging transactions pursuant to which u-blox purchases CHF under forward purchase contracts in order to minimize its CHF exposure. These transactions require judgments and assumptions about the future expense levels, and as a result, do not entirely eliminate the exposure to currency fluctuations. Furthermore, while the hedging transactions provide fixed currency rates for periods covered by the contracts, the transactions will not protect the Group from long-term movements in currency rates. The fact that revenue and cost of sales are to a certain extent denominated in the same currency provides a natural hedge.

The table below shows the significant currency risks arising from financial instruments in a foreign currency from the perspective of the Group entity which holds these financial instruments:

	For the year ended December 31, 2018		For the year ended December 31, 2017	
(in CHF 000s)	**USD**	**EUR**	**USD**	**EUR**
Cash and cash equivalents	66'856	3'698	136'539	6'892
Trade accounts receivables	32'167	7'486	23'847	6'111
Receivables from subsidiaries	14'780	2'210	31'507	3'826
Other receivables	22	17	401	4'486
Trade accounts payables	-21'443	-163	-17'798	-740
Other payables – other	-2'850	-4'317	-1'275	-2'857
Other payables – contingent consideration	0	-56	0	-438
Payables to subsidiaries	-10'344	-7'706	-19'476	-10'761
Accrued expenses	-233	0	-750	0
Total currency exposure	**78'955**	**1'169**	**152'995**	**6'519**

A 10% change in exchange rates at December 31, 2018 would have increased or decreased net profit and equity by the amounts listed below. The assumption underlying this analysis is that all other variables, in particular interest rates, remain unchanged. Substantially larger effects on the income statement can be caused by exchange rate changes related to business transactions during the year, which do not lie within the scope of IFRS 7.

Sensitivity analysis	**2018**	**2017**	**2018**	**2017**
	USD/CHF	**USD/CHF**	**EUR/CHF**	**EUR/CHF**
Change	10%	10%	10%	10%
(in CHF 000s)				
Impact on income statement and equity for positive change	6'380	12'362	94	527
Impact on income statement and equity for negative change	-6'380	-12'362	-94	-527

In respect of other monetary assets and liabilities denominated in foreign currencies, the Group ensures that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances.

26 CAPITAL MANAGEMENT

The Board's policy is to maintain a strong capital base so as to maintain investor, creditor and market confidence and to sustain future development of the business. The Board of Directors monitors both the number of shareholders, as well as the return on capital, which the Group defines as net profit divided by total shareholders' equity (based on IFRS values). Return on capital was 11.0% in 2018 (2017: 16.1%). Neither the company nor any of its subsidiaries are subject to externally imposed capital requirements. The Board plans to invest future profits, if any, into the long-term growth of the business but also, based on the sound cash situation, wants to let the shareholders participate in the business result by dividend payments or by repaying part of the share premium.

27 OPERATING LEASES

Future minimal rental payments for equipment and facility leases are as follows:

Operating leases due (in CHF 000s)	**At December 31, 2018**	**At December 31, 2017**
Within 1 year	6'672	4'194
Within 2 years	4'582	3'980
Within 3 years	3'548	2'881
Within 4 years	3'075	2'307
Thereafter	7'549	2'784
Total	**25'426**	**16'146**

This position mainly consists of office space rented.

28 GUARANTEES, PLEDGES IN FAVOR OF THIRD PARTIES AND CONTINGENT LIABILITIES

At December 31, 2018 and 2017 there were no guarantees in favor of third parties. The Group is not exposed to any significant contingent liabilities. There is no known, threatened or pending litigation against any Group companies.

29 RELATED PARTIES

Related parties are members of the Board of Directors and Executive Committee, close family members of the aforementioned parties, and shareholders with a significant influence or control over the Group, as well as entities under these parties' control.

The total compensation to the Board of Directors and Executive Committee was:

(in CHF 000s)	**For the year ended December 31, 2018**	**For the year ended December 31, 2017**
Salaries	3'048	3'253
Share-based payments	1'557	1'401
Social taxes	323	465
Employee benefit costs	650	544
Other cash benefits	7	8
Other non cash benefits	8	8
Total compensation	**5'593**	**5'679**

There were no other significant transactions with related parties during the years ended December 31, 2018 and 2017. The detailed disclosure of compensation and shareholdings of the Board of Directors and Executive Committee as per Swiss law can be found in the compensation report.

30 SUBSEQUENT EVENTS AFTER THE BALANCE SHEET DATE

The Board of Directors authorized these consolidated financial statements for issuance on March 14, 2019. In January 2019 u-blox granted 224'822 employee stock options at an exercise price of CHF 78.95 under a new stock option plan to the Executive Committee members and the employees. There have been no other events between December 31, 2018 and the date of authorization of these consolidated financial statements that would lead to an adjustment of the carrying amounts of assets and liabilities presented at December 31, 2018.

Statutory Auditor's Report

To the General Meeting of u-blox Holding AG, Thalwil

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of u-blox Holding AG and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at December 31, 2018 and the consolidated income statement, consolidated statement of comprehensive income, consolidated statement of changes in equity and consolidated statement of cash flows 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 4 to 42) give a true and fair view of the consolidated financial position of the Group as at December 31, 2018, and its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with 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.

Key Audit Matters



Capitalization of development costs



Valuation of capitalized development costs



Valuation of goodwill, acquired technology and intellectual property rights

Key audit matters are those matters that, in our professional judgment, 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.

Capitalization of development costs

Key Audit Matter

For the Group, as a fabless supplier of positioning and wireless semiconductors and modules, research & development (R&D) belongs to the core activities.

If certain criteria are met, the Group recognizes development costs as intangible assets. These criteria include, among others, the feasibility of the product, reliably measurable attributable expenditure and probable future economic benefits. In 2018, the Group capitalized development costs of TCHF 53,797 (2017: TCHF 53,817), while R&D expenditure in the amount of TCHF 56,144 (2017: TCHF 47,516) was recognized in the consolidated income statement. The assessment of the amount of costs to be capitalized for each product requires significant judgment.

There is a risk of over- or understatement of the capitalized development costs, either when the relevant criteria are not met but development costs are still capitalized, or when the criteria for capitalization are met but the costs are expensed.

Our response

Our audit procedures included, amongst others, the following:

We tested the operating effectiveness of key internal controls over the Group's approval and assessment relating to the recognition of development costs and the approval of R&D expenses.

In addition, we obtained a list of the products for which development costs incurred in the period were capitalized. We assessed if the capitalization criteria for each product were met. We challenged in our discussion with the management the business case and the underlying assumptions, as well as the stage of the development of the product, based on the internal operational reports that are prepared by the product managers. We furthermore assessed the consistency and completeness of the list of capitalized products with the operational reports. On a sample basis, we tested the accuracy of the calculation model and the underlying data, including cost rates and registered hours of the respective employees.

Based on our reading of the internal operational product reports and the discussion with management we assessed whether R&D expenses should have been capitalized.

For further information on the capitalization of development costs refer to the following:

- Note 2 to the consolidated financial statements: Accounting policies
- Note 3 to the consolidated financial statements: Critical accounting judgments and estimates
- Note 11 to the consolidated financial statements: Goodwill and other intangible assets
- Note 21 to the consolidated financial statements: Research and Development

Valuation of capitalized development costs

Key Audit Matter

The Group capitalized a significant amount of development costs, as described above. As at December 31, 2018, the carrying amount of capitalized development costs was TCHF 175,436 (2017: TCHF 131,457).

In order to assess the valuation of the capitalized costs, the Group performs an annual impairment test for those costs relating to products that are not yet available for use. In addition, the Group assesses indicators for impairment for the capitalized development costs of finalized products that are already available for use.
The recoverability of these intangible assets depends on the successful launch of the new products in the market and the continuing sale of established products. Consequently, management's assessment of the valuation involves significant judgment, among others concerning the future cash flows, associated discount rate, growth rates as well as the estimated useful life.

There is a risk of over- or understatement of capitalized development costs if they are not fully recoverable or if the estimated useful lives are not accurate.

Our response

Our work focused on challenging the assumptions used by management in conducting their valuation assessment (determination of useful life, impairment calculation and review of potential impairment indicators).

This included:
- evaluating the reasonableness of current forecasts -including a trend analysis of margins, sales and development costs against those achieved historically;
- using our valuations specialists to independently develop expectations for the discount rate and comparing the expectations to those used by management;
- assessing the accuracy of the Group's budgeting process by comparing historical sales with the original forecasts;
- for products not yet in use - considering the internal operational reports that address the development status of each product;
- for products in use - challenging management's assessment of indicators for impairment; and
- assessing management's documentation over the appropriateness of the useful lives including an analysis of expected future and actual historical sales of products.

We also evaluated the sensitivity analysis prepared by management, re-performed the calculation and assessed the disclosures relating to the impairment review.

For further information on the valuation of capitalized development costs refer to the following:

- Note 2 to the consolidated financial statements: Accounting policies
- Note 3 to the consolidated financial statements: Critical accounting judgments and estimates
- Note 11 to the consolidated financial statements: Goodwill and other intangible assets

Valuation of goodwill, acquired technology and intellectual property rights

Key Audit Matter

Goodwill, acquired technology and intellectual property rights form a significant part of the Group's assets. As at December 31, 2018, the carrying amount of goodwill was TCHF 55,231 (2017: TCHF 57,268) and of acquired technology and intellectual property rights TCHF 17,048 (2017: TCHF 20,262).

Management's assessment of the potential impairment of these assets requires estimates concerning the future cash flows of each cash-generating unit, associated discount rates and growth rates based on management's view of future business prospects.

The risk is that the targets of the business plans are not met and that consequently these balances are overstated.

Our response

Our work focused on challenging the assumptions used by management in their assessment of potential impairment.

This included:
— assessing management's key assumptions relating to the estimated future cash flows, growth rates and the discount rates applied to the separate cash-generating units including consideration of our understanding of the future prospects of the business;
— challenging the reasonableness of forecasted cash flows with reference to historical performance and benchmarking assumptions such as growth rates and discount rates to macroeconomic and market data;
— using our valuation specialists to independently develop expectations for the discount rates and comparing the expectations to those used by management; and
— comparing applied long-term growth rates included in the terminal value to historical results as well as to economic and industry forecasts using publicly available sources.

We have also evaluated the sensitivity analysis prepared by management, re-performed the calculation and assessed the disclosures relating to the impairment review.

For further information on the valuation of goodwill, acquired technology and intellectual property rights technology refer to the following:

— Note 2 to the consolidated financial statements: Accounting policies

— Note 3 to the consolidated financial statements: Critical accounting judgments and estimates

— Note 11 to the consolidated financial statements: Goodwill and other intangible assets

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 of the company, the remuneration report 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.

Responsibility 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 skepticism 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 para. 1 item 3 CO and the 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.

KPMG AG

Daniel Haas
Licensed Audit Expert
Auditor in Charge

Nicole Charrière Roos
Licensed Audit Expert

Lucerne, March 14, 2019



Financial statements u-blox Holding AG

Statement of financial position

(in CHF)	Note	At December 31, 2018	At December 31, 2017
Assets			
Current assets			
Cash at bank		21'321'485	28'022'621
Marketable securities		1'400'840	2'813'100
Other receivables - third parties		40'833	32'364
- companies in which the entity holds an investment		26'043'234	40'722'686
Prepaid expenses and accrued income		276'835	281'196
Derivative financial assets		472'620	0
Total current assets		**49'555'847**	**71'871'967**
Non-current assets			
Prepaid expenses and accrued income		577'642	834'719
Loans granted to companies in which the entity holds an investment		229'882'951	196'504'311
Investment	2.1	14'697'917	14'697'917
Total non-current assets		**245'158'510**	**212'036'947**
Total assets		**294'714'357**	**283'908'914**
Liabilities and shareholders' equity			
Current liabilities			
Other payables - companies in which the entity holds an investment		169'311	116'842
Accrued expenses		1'711'591	1'698'091
Total current liabilities		**1'880'902**	**1'814'933**
Non-current liabilities			
Long-term interest-bearing liabilities	2.2	120'000'000	120'000'000
Total non-current liabilities		**120'000'000**	**120'000'000**
Total liabilities		**121'880'902**	**121'814'933**
Shareholders' equity			
Share capital	2.3	6'389'871	6'261'453
Legal capital reserve			
- Reserves from capital contributions	2.4	129'536'678	118'002'595
Legal retained earnings			
- general legal retained earning		6'519'025	6'243'563
Voluntary retained earnings			
Available earnings			
- profit brought forward		56'008'815	50'337'882
- profit for the year		6'409'632	5'670'933
Treasury shares	2.5	-32'030'566	-24'422'445
Total shareholders' equity		**172'833'455**	**162'093'981**
Total liabilities and shareholders' equity		**294'714'357**	**283'908'914**

Income statement

(in CHF)	Note	For the year ended December 31, 2018	For the year ended December 31, 2017
Income			
Dividend income	2.6	6'000'000	6'000'000
Other financial income	2.7	3'932'056	3'056'056
Total income		**9'932'056**	**9'056'056**
Expenses			
Financial expenses	2.8	-2'433'194	-2'229'430
Other operating expenses		-1'027'682	-1'137'986
Direct taxes		-61'548	-17'707
Total expenses		**-3'522'424**	**-3'385'123**
Profit for the year		**6'409'632**	**5'670'933**

Notes to the financial statements

1 PRINCIPLES

u-blox Holding AG was incorporated on September 21, 2007 in Thalwil, Switzerland by exchange of 100% of the shares obtained by the shareholders of u-blox AG. On October 25, 2007, u-blox Holding AG offered in an initial public offering some of its shares to the public.

1.1 GENERAL ASPECTS

These financial statements were prepared according to the principles of the Swiss Law on Accounting and Financial Reporting (32nd title of the Swiss Code of Obligations). Where not prescribed by law, the significant accounting and valuation principles applied are described below.

1.2 DERIVATIVES & MARKETABLE SECURITIES

Securities with a short-term holding period and derivative instruments are valued at their quoted market price as at the balance sheet date. A valuation adjustment reserve has not been accounted for.

1.3 LOANS TO GROUP COMPANIES

Financial assets include a long-term loan to u-blox AG. It is valued at its acquisition cost.

1.4 TREASURY SHARES

Treasury shares are recognized at acquisition cost and deducted from shareholders' equity at the time of acquisition. In case of a resale, the gain or loss is recognized through the income statement as financial income or financial expense.

1.5 SHARE-BASED PAYMENTS

Shares awarded to employees within share-based payment programs are granted by capital increase. The amount paid by the employees for the nominal value of the shares awarded is recorded in share capital, while the paid amount exceeding the nominal value is considered to be a share premium and is recorded in legal capital reserves. The difference between the amount paid and the market value of the shares is also recorded in legal capital reserves. u-blox Holding AG is compensated for the difference by subsidiaries.

1.6 LONG-TERM INTEREST-BEARING LIABILITIES

Interest-bearing liabilities are recognized in the balance sheet at nominal value. Discounts and issue costs for bonds are recognized as prepaid expenses and amortized on a straight-line basis over the bond's maturity period.

2. INFORMATION ON BALANCE SHEET AND INCOME STATEMENT ITEMS

2.1 INVESTMENTS

	Share capital in (million)		Share in capital and voting rights in %		
	Dec. 31, 2018	Dec. 31, 2017	Dec. 31, 2018	Dec. 31, 2017	
u-blox AG, CH-Thalwil	CHF 4.23	CHF 4.23	100%	100%	
u-blox Europe Ltd., UK-Charing	GBP 0.06	GBP 0.06	100%	100%	indirectly held
u-blox Asia Pacific Ltd., HK-Hong-Kong	USD 0.10	USD 0.10	100%	100%	indirectly held
u-blox America Inc., US-Reston	USD 0.10	USD 0.10	100%	100%	indirectly held
u-blox Singapore Pte. Ltd., SG-Singapore	SGD 0.10	SGD 0.10	100%	100%	indirectly held
u-blox Japan K.K., JP-Tokyo	JPY 10.00	JPY 10.00	100%	100%	indirectly held
u-blox Italia S.p.A., IT-Sgonico	EUR 0.40	EUR 0.40	100%	100%	indirectly held
u-blox UK Ltd., UK-Reigate	GBP 0.00	GBP 0.00	100%	100%	indirectly held
u-blox San Diego Inc., US-San Diego	USD 0.00	USD 0.00	100%	100%	indirectly held
u-blox Melbourn Ltd., UK-Melbourn	GBP 0.14	GBP 0.14	100%	100%	indirectly held
u-blox Espoo Oy, FI-Espoo (former Fastrax)	EUR 0.05	EUR 0.05	100%	100%	indirectly held
u-blox Luton Ltd., UK-Luton	GBP 0.00	GBP 0.00	100%	100%	indirectly held
u-blox Lahore (Private) Ltd., PK-Lahore	PKR 14.11	PKR 14.11	100%	100%	indirectly held
u-blox Cork Ltd., IE-Cork	EUR 0.00	EUR 0.00	100%	100%	indirectly held
u-blox Malmö AB, SE-Malmö (former connectBlue)	SEK 0.83	SEK 0.83	100%	100%	indirectly held
u-blox Antcor S.A., GR-Athen	EUR 0.18	EUR 0.18	100%	100%	indirectly held
u-blox Berlin GmbH, DE-Berlin	EUR 0.03	EUR 0.03	100%	100%	indirectly held
Sapcorda Services GmbH, DE-Berlin	EUR 0.03	EUR 0.03	42.96%	100%	indirectly held
u-blox Wireless Technology (Shanghai) Ltd.	USD 0.02	USD 0.01	100%	100%	indirectly held
u-blox Electronics (Shanghai)	USD 0.02	–	100%	–	indirectly held

2.2 LONG-TERM INTEREST-BEARING LIABILITIES

At April 18, 2017, u-blox issued a bond for TCHF 60'000 (net cash inflow of TCHF 59'284) with a coupon of 1.375% p.a. and a term to maturity of 6 years.
At April 23, 2015, u-blox issued a bond for TCHF 60'000 (net cash inflow of TCHF 59'200) with a coupon of 1.625% p.a. and a term to maturity of 6 years.

2.3 SHARE CAPITAL

The share capital consists of 7'099'857 (2017: 6'957'170) registered shares with a nominal value of CHF 0.90 each.

AUTHORIZED SHARE CAPITAL

	At December 31, 2018	At December 31, 2017
Number of registered shares	1'018'000	1'018'000
With a nominal value of CHF 0.90 each	CHF 916'200	CHF 916'200

The Board of Directors is authorized, at any time until April 30, 2019, to increase the share capital through the issuance of up to 1'018'000 fully paid-in registered shares with a nominal value of CHF 0.90 each in an aggregate amount not to exceed CHF 916'200.

CONDITIONAL SHARE CAPITAL

	At December 31, 2018	At December 31, 2017
Number of registered shares	108'227	113'464
With a nominal value of CHF 0.90 each	CHF 97'404	CHF 102'118

In 2018, 142'687 options were exercised and therefore newly shares issued of 137'450, which decreased the conditional share capital at December 31, 2018 to 108'227 shares with a nominal value of CHF 0.90. At December 31, 2018 there were 692'846 options (at December 31, 2017: 660'375 options) on u-blox Holding AG shares outstanding.

2.4 RESERVES FROM CAPITAL CONTRIBUTIONS

The reserves from capital contributions include the premium from capital increases, minus the dividends distributed to date.

From a fiscal point of view, any distributions made from reserves from capital contributions are treated the same as a repayment of share capital. The Swiss Federal Tax Administration (SFTA) has confirmed that it will recognize disclosed reserves from capital contributions as a capital contribution as per art. 5 para. 1 bis Withholding Tax Act.

2.5 TREASURY SHARES

In 2018 u-blox purchased 53'000 treasury shares at the average purchase price of CHF 143.55 per share.

In 2017 u-blox purchased 125'000 treasury shares at the average purchase price of CHF 195.38 per share.

	Number of transactions	Lowest rate in CHF	Highest rate in CHF	Average rate of transaction in CHF	Quantity
Inventory as at January 1, 2017					**0**
Acquisitions	5	188.00	200.00	195.38	125'000
Sales	0	0	0	0	0
Allocation to board members	0	0	0	0	0
Inventory as at December 31, 2017					**125'000**
Acquisitions	10	136.14	147.38	143.55	53'000
Sales	0	0	0	0	0
Allocation to board members	0	0	0	0	0
Inventory as at December 31, 2018					**178'000**

2.6 DIVIDEND INCOME

In the reporting year, dividend income amounted to TCHF 6,000 (previous year: TCHF 6,000) from u-blox AG.

2.7 OTHER FINANCIAL INCOME

The other financial income mostly consists of interest income from u-blox AG over CHF 3.5 million (previous year: CHF 3.3 million).

2.8 FINANCIAL EXPENSES

CHF 1'000	At December 31, 2018	At December 31, 2017
Securities expenses	829	463
Interest on bonds	1'596	1'758
Amortization of discounts and issue costs	8	8
Total	**2'433**	**2'229**

3 OTHER INFORMATION

3.1 FULL-TIME EQUIVALENTS

u-blox Holding AG does not have any employees.

3.2 SIGNIFICANT SHAREHOLDERS

According to the disclosures of shareholders, the largest shareholders of u-blox Holding AG held the following percentages at:

	Voting rights as at December 31, 2018	Voting rights as at December 31, 2017
Credit Suisse Group AG, Zurich, Switzerland	9.24%	n.a.*
Baillie Gifford & Co.	5.53%	3.05%
Credit Suisse Funds AG, Zurich, Switzerland	5.16%	n.a.*
Atlantic Value General Partner Limited, London, UK	4.73%	5.13%

*) n.a. = 0-3% voting rights.

3.3 SHAREHOLDING OF MEMBERS OF THE BOARD OF DIRECTORS, EXECUTIVE COMMITTEE OR PERSONS RELATED TO THEM

The total number of u-blox shares and options owned by members of the Executive Committee, the Board of Directors and the persons related to them are shown in the tables below. The shares are not restricted.

Shareholdings of Non-Executive members of the Board of Directors

	Number of u-blox Holding AG shares at December 31, 2018	Number of u-blox Holding AG shares at December 31, 2017
Fritz Fahrni[1)] Chairman of the Board of Directors Member of the Audit Committee Member of the nomination and compensation committee	0	16'292
Gerhard Tröster Chairman of the nomination and compensation committee[1)] Member of the nomination and compensation committee	14'161	16'661
Paul Van Iseghem Vice Chairman of the Board of Directors Chairman of the Audit Committee	2'524	1'424
André Müller Chairman of the Board of Directors[2)]	2'000	0
Gina Domanig Member of the nomination and compensation committee Chairman of the nomination and compensation committee[2)]	400	0
Ulrich Looser[2)] Member of the Board of Directors Member of the Audit Committee	1'000	0
Total Non-Executive members of the Board of Directors	**20'085**	**34'377**

[1)] Resigned at the AGM 2018.

[2)] Elected at the AGM 2018.

Shareholdings Executive Committee (including Executive members of the Board of Directors)

	Number of u-blox Holding AG shares at December 31, 2018	Number of u-blox Holding AG shares at December 31, 2017
Thomas Seiler Member of the Board of Directors CEO Head of Marketing and Sales	136'854	132'554
Jean-Pierre Wyss Member of the Board of Directors Executive Vice President (Production/Logistics)	23'087	26'095
Andreas Thiel Executive Vice President (R&D Wireless Products)	40'510	37'500
Daniel Ammann Executive Vice President (R&D Positioning Products)	30'547	33'243
Roland Jud CFO	4'363	363
Total Executive Committee (incl. Executive members of the Board of Directors)	**235'361**	**229'755**

Options Executive Committee (including Executive members of the Board of Directors)

	Number of u-blox Holding AG options at December 31, 2018	Number of u-blox Holding AG options at December 31, 2017
Thomas Seiler Member of the Board of Directors CEO Head of Marketing and Sales	24'477	21'148
Jean-Pierre Wyss Member of the Board of Directors Executive Vice President (Production/Logistics)	27'977	22'148
Andreas Thiel Executive Vice President (R&D Wireless Products)	27'977	23'229
Daniel Ammann Executive Vice President (R&D Positioning Products)	20'173	21'148
Roland Jud CFO	27'279	24'621
Total Executive Committee (incl. Executive members of the Board of Directors)	**127'883**	**112'294**

3.4 OPTIONS ON SHARES FOR MEMBERS OF THE BOARD AND EXECUTIVE COMMITTEE

	2018		2017	
	Quantity	Value CHF 1'000	Quantity	Value CHF 1'000
Allocated to members of the Board	0	0	0	0
Allocated to Executive Committee	33'974	1'483	33'194	1'476

3.5 SIGNIFICANT EVENTS AFTER THE BALANCE SHEET DATE

There have been no events between December 31, 2018 and March 14, 2019 that would lead to an adjustment of the carrying amounts of assets and liabilities presented at December 31, 2018 or would otherwise have to be disclosed.

Proposal of the Board of Directors for appropriation of available earnings and the use of reserves from capital contributions

The Board of Directors proposes to the Annual General meeting the following appropriation of available earnings and the use of reserves from capital contributions at December 31, 2018.

(in CHF)	2018	2017
Profit for the year	6'409'632	5'670'933
Brought forward from previous year	56'008'815	50'337'882
Available earnings before appropriation	**62'418'447**	**56'008'815**
Release of reserves from capital contributions[1)]	11'359'771	15'653'633
Total available earnings before appropriation	**73'778'218**	**71'662'448**
Dividend payment out of reserves from capital contributions, CHF 1.60 per share on 7'099'857 shares[1)]	-11'359'771	-15'653'633
To be carried forward	**62'418'447**	**56'008'815**

[1)] Depending on the number of shares issued at April 25, 2019.

The Board of Directors is proposing to the General Meeting, to be held at April 25, 2019, to carry forward the available earnings 2019 of CHF 62'418'447 and to pay out a dividend of CHF 1.60 per share exempt from Swiss withholding tax out of the reserves from capital contributions. The last trading day with entitlement to receive the dividend is April 26, 2019. The shares will be traded ex-dividend as of April 29, 2019. The dividend will be payable as of May 3, 2019.

Thalwil, March 14, 2019

For the Board of Directors
The Chairman André Müller

Statutory Auditor's Report

To the General Meeting of u-blox Holding AG, Thalwil

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of u-blox Holding AG, which comprise the statement of financial position as at 31. December, 2018, and the income statement for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion the financial statements (pages 50 to 56) for the year ended 31. December, 2018 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.

Report on Key Audit Matters based on the circular 1/2015 of the Federal Audit Oversight Authority

We have determined that there are no key audit matters to communicate in our report.

Responsibility 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 skepticism 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 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 para. 1 item 3 CO and the 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.

KPMG AG

Daniel Haas
Licensed Audit Expert
Auditor in Charge

Nicole Charrière Roos
Licensed Audit Expert

Lucerne, March 14, 2019



Three year overview

Condensed consolidated income statement

	For the year ended December 31,		
(in CHF 000s)	**2018**	**2017**	**2016**
Revenue	**393'269**	**403'712**	**360'230**
% growth	-2.6%	12.1%	6.5%
Cost of sales	-216'151	-219'695	-193'123
Gross profit	**177'118**	**184'017**	**167'107**
% gross profit margin	45.0%	45.6%	46.4%
Operating expenses	-132'646	-120'852	-110'136
Other income	3'818	1'921	2'033
Operating profit (EBIT)	**48'290**	**65'086**	**59'004**
% operating profit (EBIT) margin	12.3%	16.1%	16.4%
Finance income	5'305	5'668	4'337
Finance costs	-2'158	-5'652	-1'653
Share of profit of equity-accounted investees, net of taxes	-3'339	-400	0
Profit before income tax (EBT)	**48'098**	**64'702**	**61'688**
% operating profit (EBIT) margin	12.2%	16.0%	17.1%
Income tax expense	-9'617	-13'442	-15'488
Net profit, attributable to owners of the parent	**38'481**	**51'260**	**46'200**
% net profit margin	9.8%	12.7%	12.8%
Depreciation and amortization	23'356	22'290	22'762
EBITDA*)	**71'646**	**87'376**	**81'766**
% EBITDA margin	18.2%	21.6%	22.7%

*) EBITDA (earnings before interest, taxes, depreciation and amortization) calculated by adding depreciation and amortization to profit from operations (EBIT), in each case determined in accordance with IFRS.

Condensed consolidated statement of financial position

(in CHF 000s)	At December 31, 2018	At December 31, 2017	At December 31, 2016
Assets			
Current assets			
Cash and cash equivalents	136'296	169'624	149'545
Marketable securities	1'401	2'813	7'573
Trade accounts receivables	60'802	50'401	39'792
Other current assets	78'415	60'476	42'670
Total current assets	**276'914**	**283'314**	**239'580**
Non-current assets			
Property, plant and equipment	14'829	17'494	15'774
Goodwill	55'231	57'628	54'104
Other intangible assets	193'445	153'986	111'905
Other financial assets	1'063	1'141	1'074
Equity-accounted investees	7'978	7'210	0
Deferred tax assets	3'570	3'739	2'435
Total non-current assets	**276'116**	**241'198**	**185'292**
Total assets	**553'030**	**524'512**	**424'872**
Liabilities and equity			
Current liabilities	55'476	58'946	59'098
Non-current liabilities	148'677	147'054	81'047
Total liabilities	**204'153**	**206'000**	**140'145**
Shareholders' equity			
Share capital	6'390	6'261	6'152
Share premium	66'296	66'579	74'387
Treasury shares	-32'031	-24'422	
Retained earnings	308'222	270'094	204'188
Total equity, attributable to owners of the parent	**348'877**	**318'512**	**284'727**
Total liabilities and equity	**553'030**	**524'512**	**424'872**

Condensed consolidated statement of cash flows

	For the year ended December 31,		
(in CHF 000s)	2018	2017	2016
Net cash generated from operating activities	36'342	60'504	93'559
Net cash used in investing activities	-63'391	-63'511	-45'711
Net cash provided by/used in financing activities	-9'681	26'012	-10'515
Net increase in cash and cash equivalents	**-36'730**	**23'005**	**37'333**
Cash and cash equivalents at beginning of year	169'624	149'545	112'387
Exchange gains/(losses) on cash and cash equivalents	3'402	-2'926	-175
Cash and cash equivalents at end of year	**136'296**	**169'624**	**149'545**

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