Annual Report 2019

RUAG is beginning its conversion into a global aerospace group. Results are impacted by exceptional expenses.

Together ahead. RUAG

Contents

The 2019 financial year

The year at a glance

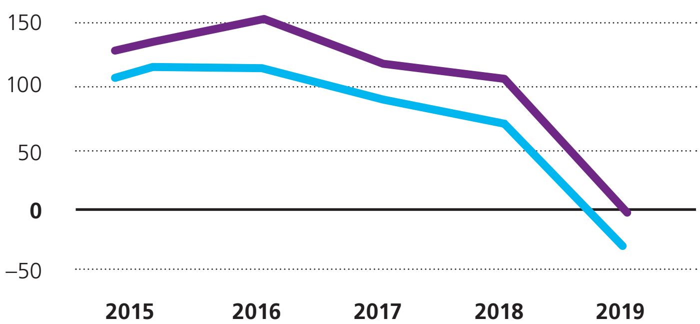
RUAG sales exceeded the 2-billion mark in 2019 for the first time. However, the sales of CHF 2,003 million (previous year: CHF 1,998 million) are set against an EBIT of CHF –7 million (previous year: CHF +106 million). The negative operating results are due to the costs of the unbundling process and the related decision to sell parts of RUAG's international activities. This portfolio clean-up led to exceptional expenses for the Dornier 228 production programme.

The process of converting into a global aerospace group is making good progress with the sale of Clearswift as well as two Swiss locations for civil aircraft maintenance. The proportion of sales generated in the civil sphere remained stable at 56 % in the reporting year, as did the share of foreign operations (63 %). By far the most important customer was the Swiss Federal Department of Defence, Civil Protection and Sport (DDPS), recording a share of sales of 32 % (previous year: 30 %).

EBIT and net profit in 2019

Both earnings before interest and taxes (EBIT) and the net profit dropped as a result of exceptional expenses to CHF –7 million (CHF 106 million) and CHF –25 million (CHF 74 million) respectively.

Development of EBIT and net profit 2015 – 2019
in CHF m



Overview of key figures
in CHF m

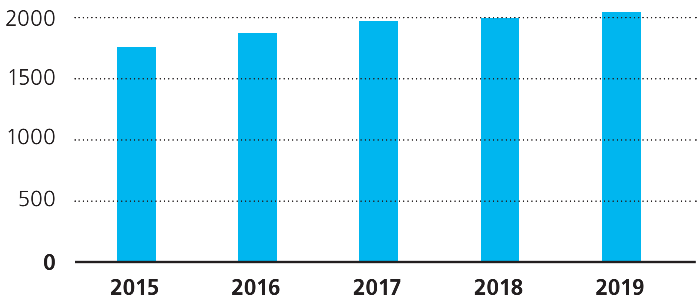
	2019	2018	Change in %
Order intake	1 893	2 221	– 14.8 %
Order backlog	1 634	1 794	–8.9 %
Net sales	2 003	1 998	0.2 %
Operating income	1 988	2 013	– 1.3 %
Earnings before interest, taxes, depreciation and amortisation (EBITDA)	86	186	– 54.0 %
EBIT	(7)	106	– 106.9 %
Net profit	(25)	74	– 139.2 %
Cash flow from operating activities	133	176	– 21.3 %
Free cash flow	135	94	44.5 %
Net financial position	237	134	76.7 %
Research and development expenses	173	179	–3.5 %
Employees (FTE) as at 31 December incl. apprentices	9 091	9 127	–0.4 %

For detailed figures, see Note 5 "Segment information" in the financial statements.

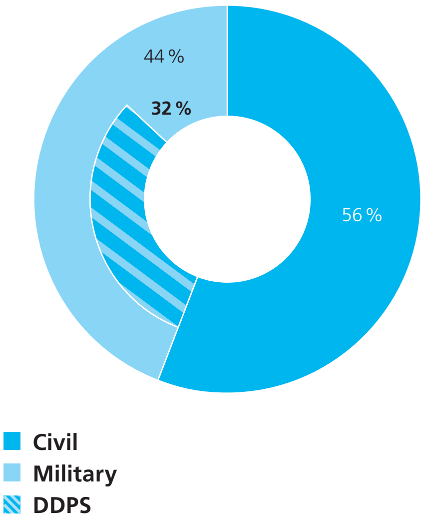
Net sales in 2019

RUAG sales exceed the 2-billion mark for the first time in 2019. Adjusted for foreign currency effects and divestments, growth amounted to 3.4 %.

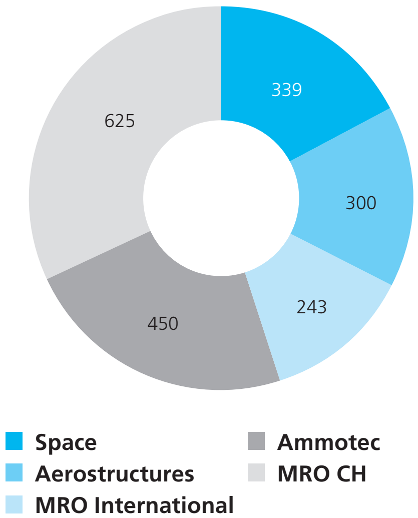
Development of net sales 2015 – 2019
in CHF m



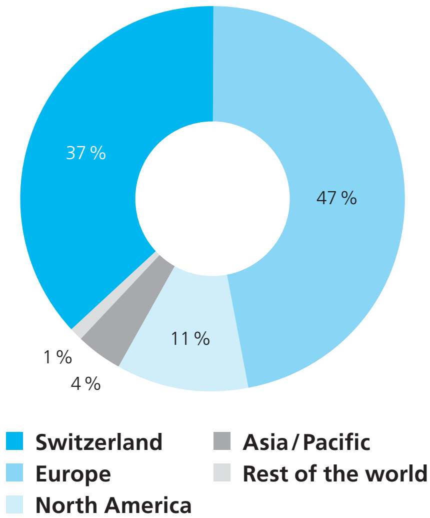
Net sales 2019 by application
in %



Net sales 2019 by division
in CHF m



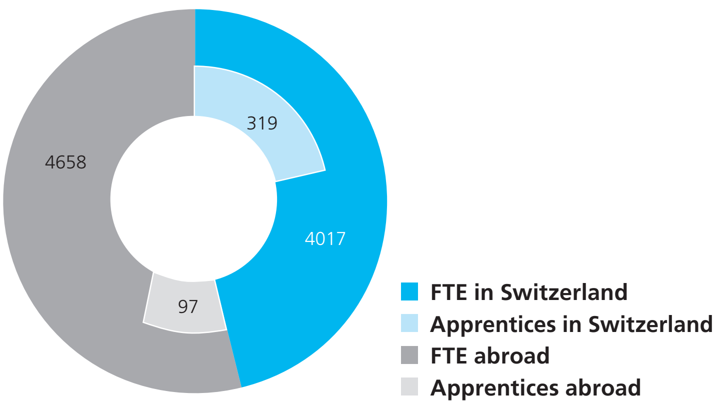
Net sales 2019 by market
in %



Headcount 2019

Compared to the previous year, the headcount decreased by 0.4 % to 9,091.

Headcount in Switzerland and abroad



The unbundling of RUAG is a historic and unique event in Switzerland's history, and requires the utmost dedication from both the Group Executive Board and all of RUAG's employees in the process of executing it.

Dear shareholder,
Dear customers,
Dear readers,

20 years ago, Swiss politics set the course for the foundation of RUAG. Today RUAG is an industrial company with 9,100 employees, net sales of around two billion Swiss francs, sites in 14 countries and a strong international market presence. It is now a Group that also occupies an important position in Switzerland as an industrial centre, in the training of professionals and in activities conducted to provide indirect support for regional policy.

This dynamic development has progressed to such an extent that the Confederation's participation in some of RUAG's activities is no longer in the public interest. This, combined with the need to tighten IT security in areas in direct contact with the Swiss Armed Forces and reduce the risk of damaging the government's reputation in international business (as it is the sole shareholder), led to the Swiss Federal Council deciding on 21 March 2018 to separate RUAG into two independent companies: RUAG MRO Switzerland and RUAG International.

It has taken just 20 months to execute this decision, and it has been possible to do so while remaining on schedule. We are now at the stage where the parent company – the holding company BGRB Holding Ltd – has been founded and the Swiss Confederation, as the owner of the holding company, has set out clear objectives for the next four years.

A range of indicators and relevant key figures have been put in place to make the Swiss Federal Council's strategic objectives measurable. These were agreed upon as part of an in-depth consultation process with all affected stakeholders. It will now be possible to review the degree to which the objectives are being met, and the profitability of the two new companies, on a regular basis until RUAG International is privatised. Implementing an optimised company risk management system in both subholding companies will also enable both Boards of Directors and the owner to stay fully informed at all times about the most significant risks to the business.

"RUAG has developed in such a way that it is no longer in the public interest for the Confederation to be involved in some of its activities."

All three Boards of Directors were appointed in line with the Swiss Federal Council's specifications. Each of the three boards comprises the expertise, integrity and diversity needed to drive them forward: they are made up of independent women and men who have vision and recognise that this fresh start provides a fantastic opportunity to help both subholding companies evolve even more effectively. Continuity in the supervisory boards of the two new subholding companies is being maintained in the form of members of the current RUAG Holding Ltd Board of Directors.

For RUAG International, the challenge will be to focus on the part of RUAG that has been separated from the activities for the Swiss Armed Forces, and ideally to float the company on the stock market as an industry and technology group in the aerospace industry – with all the opportunities and risks that this brings.

An intensive formative period is in store for RUAG MRO Switzerland, during which the mutual requirements of the Swiss Armed Forces, armasuisse (the Federal Office for Defence Procurement) and RUAG will lead to a new partnership that will properly address Switzerland's regional objectives. To be successful, both subholding companies will also need a single research and development strategy.

As things stand today, we are focused on more than simply ensuring continuity after the unbundling process: instead, we are witnessing a fresh start involving two brand new companies.

The Swiss Confederation, as the owner, is not just responsible for RUAG – it has many other regional interests to take into account. Its expectations of RUAG go beyond simply normative provisions and extend to upholding ethical practices when dealing with various stakeholders, such as employees, customers, Switzerland as an industrial centre, Switzerland as a place of research, and wider society.

The Swiss Federal Council expects the following:

- That both subholding companies and the companies controlled by them, either directly or indirectly, will remain committed to delivering vocational training in Switzerland, providing appropriate training opportunities and creating jobs that are as attractive as possible under market economy conditions
- That RUAG MRO Switzerland (RUAG MRO Holding Ltd) and the companies that it controls, either directly or indirectly, will align their research and development activities with the medium-term and long-term interests of the Swiss Armed Forces
- That RUAG International (currently RUAG Holding Ltd) and the aerospace companies it controls, either directly or indirectly, will consider Switzerland's geopolitical interests when taking advantage of economic opportunities and, in doing so, continue to pursue efforts to strengthen European sites and engage in further technological development in Europe

However, the unbundling of RUAG also means divestment. Integration with RUAG MRO Switzerland will not be possible in the case of several business units that are not key to security policy and do not provide services crucial to deployments of the Swiss Armed Forces or partners in the Swiss Security Network. At the same time, those units that do not fit into RUAG International's future portfolio strategy will also need to be divested. The primary goal in this process is always to secure a sale. However, closure could also be necessary in individual cases in order to achieve the objective of two sustainable companies at the end of the unbundling process.

This extraordinary project can only be carried out successfully with the commitment of all employees, the support of all the partners involved, and our valued customers once again placing their confidence in us. We are optimistic about achieving this and wish to thank you in advance for your support.

Dr. Monica Duca Widmer
Chair of the Board of Directors, BGRB Holding Ltd

Corporate governance of BGRB Holding Ltd

As the owner of BGRB Holding Ltd, the Swiss Federal Council defines certain strategic objectives, which generally cover four years. Every year, BGRB Holding Ltd provides the Swiss Federal Council with a full account of the extent to which it has achieved these objectives. For its part, the Swiss Federal Council creates an annual report for the attention of the Swiss Parliament.

The Swiss Federal Council, as a collegial body, is responsible for taking on the role of owner. In the dual model, preparation for and coordination of the owner's political affairs are separated into the Swiss Federal Department of Defence, Civil Protection and Sport (DDPS) and the Swiss Federal Finance Administration (FFA).

For reporting and management purposes, a key figure system is used to make the strategic objectives measurable. This allows achievements to be reviewed periodically and leaves room for changes to be made if necessary.

The Swiss Federal Council's strategic objectives include the stipulation that the BGRB Holding Ltd companies have a risk management system based on the ISO 31000 standard, and that they use this system to inform the owner of the most significant risks facing the business. The risk management system must be reviewed once in every four-year strategy period through an independent audit. Operating a risk management system is one of the prime responsibilities of the BGRB Holding Ltd Board of Directors.

The bodies entrusted with attending to the owner's interests, as expressed by the Swiss Confederation, will conduct regular owner-focused discussions that are set to become established elements of how the companies operates. The framework and process for this exchange of information will be systematised using prompt scheduling and through defining recurring agenda items. Preparatory specialist discussions will likewise be established as the norm and minutes of the discussions will be taken. The DDPS – with the input of the Swiss Federal Department of Finance (FDF) – has a lead role in monitoring and managing BGRB Holding Ltd and business activities related to RUAG MRO Switzerland. Meanwhile, the FDF – with the input of the DDPS – has a lead role in the area of business relating to RUAG International.

The Swiss Federal Council has additional management opportunities available to it; these include selecting the BGRB Holding Ltd Board of Directors, approving the annual report and financial statements, and granting or refusing discharge.

New statutory auditor

The Swiss Federal Council has instructed the DDPS to appoint Ernst & Young as the statutory auditor for the holding company BGRB Holding Ltd. As well as conducting the usual audit activities, the auditor will check that the costing principles specified by the Swiss Confederation are adhered to in the case of RUAG MRO Switzerland orders that are being fulfilled for the benefit of the Swiss Armed Forces.

Members of the Board of Directors, BGRB Holding Ltd
Dr. Monica Duca Widmer, Chair
Dr. Monika Krüsi Schädle, Member
Dr. Remo Lütolf, Member
Nicolas Perrin, Member
Ariana Richter Merz, Member

Members of the Board of Directors, RUAG MRO Holding Ltd (RUAG MRO Switzerland)
Nicolas Perrin, Chair
Heinz Liechti, Vice-Chairman
Nicolas Gremaud, Member
Caroline Kuyper LeBlond, Member
Prof. Sibylle Minder Hochreutener, Member

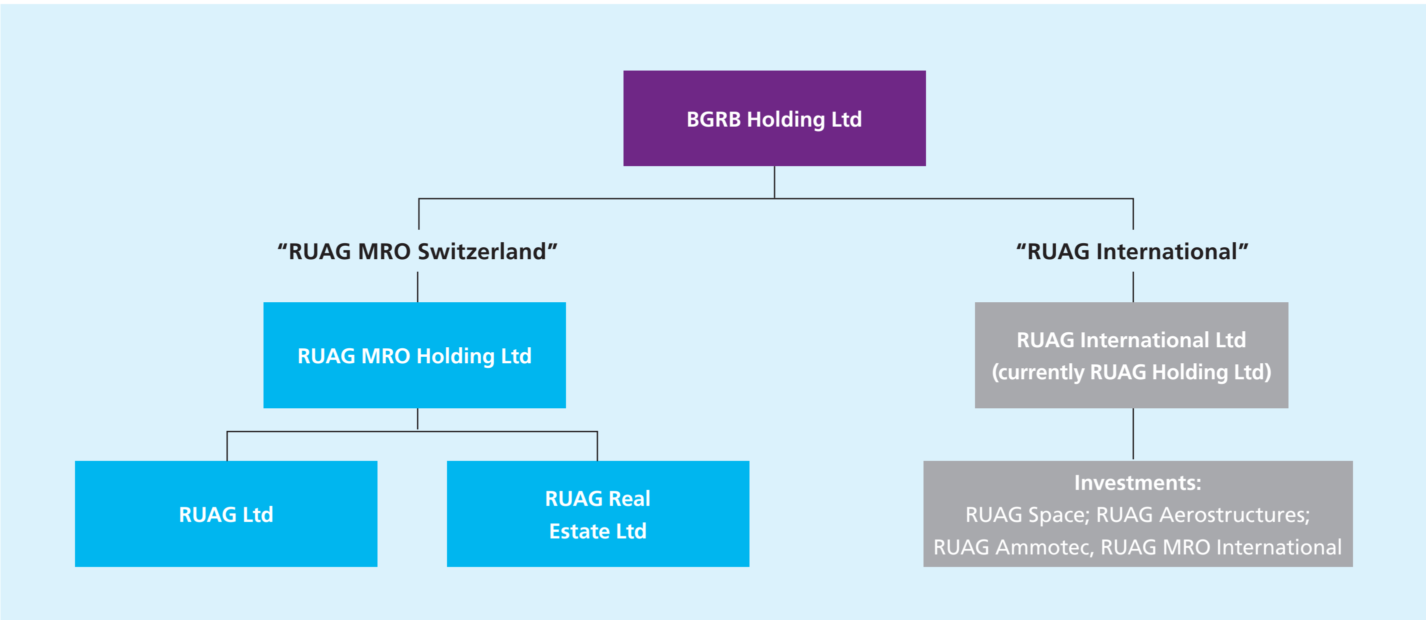
Members of the Board of Directors, RUAG International Ltd (currently RUAG Holding Ltd)
Dr. Remo Lütolf, Chair
Jürg Oleas, Vice-Chairman
Dr. Marie-Pierre de Bailliencourt, Member
Jennifer P. Byrne, Member
Jürg Fedier, Member
Rainer G. Schulz, Member
Dr. Laurent Sigismondi, Member

Organisation of BGRB Holding Ltd

The new holding company BGRB Holding Ltd will monitor the implementation of the strategic objectives set out by the Swiss Federal Council and the organisational specifications in the two subholding companies. The organisational structures have been defined and regulations have been established for dividing up tasks among the various parties involved.

In 2018, the Swiss Federal Council decided that the activities RUAG carries out as a material centre of excellence for the Swiss Armed Forces would be fully unbundled from its remaining areas of business, which are focused on the international and civilian markets. This requires new organisational structures that have been adapted in line with the new mandate. The ceremony marking the foundation of the new companies took place on 15 November 2019 and was attended by Ueli Maurer, President of the Federal Council, and Viola Amherd, Head of the Swiss Federal Department of Defence, Civil Protection and Sport (DDPS). The holding company BGRB Holding Ltd and the subholding company RUAG MRO Switzerland (RUAG MRO Holding Ltd), both new subsidiaries, were the subject of the celebrations. Together with RUAG International Ltd (currently RUAG Holding Ltd), the new subholding structure has become operational as of 1 January 2020 and its full legal unbundling will be completed by mid-May 2020.

MRO Holding Ltd comprises two companies: RUAG Ltd, the technology partner of the Swiss Armed Forces, and RUAG Real Estate Ltd, which administers RUAG's real estate portfolio. RUAG International comprises the two former RUAG Space and RUAG Aerostructures divisions, as well as all international and civilian activities that are to be divested over the course of the next two years.



Strategic objectives set

In parallel to the foundation of the new companies, the Swiss Federal Council has created the strategic objectives for BGRB Holding Ltd and its two subholding companies. As the holding company, BGRB Holding Ltd must ensure that the subholding companies execute the missions they have been given. One of these involves ensuring that the service provision for the Swiss Armed Forces is on schedule, cost optimised and high quality, and that it caters to the Forces' needs. Another requires the companies to ensure that the aerospace and aircraft structure-building activities are developed into a viable, globally active aerospace group that is headquartered in Switzerland and is ready to be privatised. As part of this, the option of a separate sale must remain on the table. The remaining international activities are to be divested.

One of BGRB Holding Ltd's key tasks is to ensure that the two subholding companies are managed in a uniform way and on the basis of the same corporate governance principles. The Swiss Federal Council's specifications in this area include the obligation to set up a risk management system that aligns with the ISO 31000 standard. In the field of export control, all business units will be expected to work in accordance with the principles of Swiss foreign policy, regardless of their location, and abide by Swiss export control legislation. This applies to military equipment and dual-use goods, as well as activities conducted together with private security services provided abroad. Equally, it will be vital to ensure that all business units take suitable measures to prevent active and passive corruption.

In the field of environmental and social responsibility, the company requires its activities to be aligned with environmentally sustainable principles. It also promotes a progressive, transparent staff policy that meets national standards and is based on agreements made in a social partnership and on ethical foundations. As part of this, the company is required to focus on providing vocational training opportunities in Switzerland. Compensation is expected to be brought in line with successful results that the company achieves over a sustained period, and must comply with the relevant federal laws and regulations.

Organisation and responsibilities defined

The work of BGRB Holding Ltd is governed by the Regulations Governing Organisation and Operations, which sets out the rights and duties of the holding company and its subsidiaries, and is tailored to accommodate the company's specific needs. The holding company's organisational structure consists of the Board of Directors, the Chair of the Board of Directors and two committees. The primary task of these bodies is to monitor the implementation of the strategic objectives that the Swiss Federal Council has set for the subholding companies. They will use concepts and tools relating to risk management, internal audit and compliance to achieve this. The tasks of both subholding companies include the strategies, organisations, processes and financing of its Group companies as defined within the framework of the owner objectives. If businesses of the subholdings affect the tasks of BRGB Holding Ltd however, it shall have the right to consultation.

Clarification of responsibility on the part of the Swiss Confederation and during the transition period

Two memorandums of understanding have clarified the responsibilities of both Swiss federal departments involved in the unbundling process and of the three holding companies during the transition period until the unbundling process has been legally completed.

The Swiss Federal Department of Defence, Civil Protection and Sport (DDPS) and the Swiss Federal Department of Finance (FDF) jointly represent the Swiss Federal Council with respect to BGRB Holding Ltd; this provides a line of contact between the owner and RUAG. In this role, the two departments prepare all the owner's policy business and decisions for the benefit of the Swiss Confederation. Within this structure, the DDPS has overall control of monitoring and managing BGRB Holding Ltd itself, as well as business that falls within the remit of RUAG MRO Switzerland. The FDF has overall control of all other business that falls within the remit of RUAG International. A diverse preparation team made up of representatives from the FDF, the DDPS, BGRB Holding Ltd and RUAG International is being formed to implement RUAG International's strategic objectives, which in particular include divesting munitions production and the Simulation & Training business unit, as well as developing Space and Aerostructures into an Aerospace Group. Responsibility on the part of the Swiss Confederation is conducted by the Director of the Swiss Federal Finance Administration (FFA), while the Chair of the BGRB Holding Ltd Board of Directors is responsible for RUAG.

The three holding companies have been regulating the tasks over the transition period that started on 1 January 2020, and will continue to do so until the unbundling process has been legally completed in mid-May 2020. During this period, responsibility for financial operations will be separated from responsibility for legal matters. The BGRB Holding Ltd Board of Directors has been responsible for the tasks assigned to it by law and according to the strategic objectives of the Swiss Federal Council since 1 November 2019. The RUAG International (currently RUAG Holding Ltd) Board of Directors has been responsible for RUAG International since 1 January 2020. It also relinquished responsibility for RUAG MRO Switzerland at this point, with the RUAG MRO Holding Ltd Board of Directors taking up this mantle on 1 January 2020. The Group Executive Board of RUAG International will continue reporting to RUAG International's (currently RUAG Holding Ltd) Board of Directors during the transition period. All three Boards of Directors are in charge of implementing the unbundling process in the correct manner.

Conversion in global aerospace group launched. Exceptional charges impact the results.

The two independent companies emerging from RUAG can begin operating on the back of new sales peak, a large volume of orders and a net financial position demonstrating strong growth. However, due to the unbundling costs and the related decision to sell some of the international activities, the Group reported a deficit in 2019.

Dear Shareholder,
Dear Customers,
Dear Readers,

In 2019, net sales exceeded the 2 billion sales mark for the first time, at CHF 2,003 million. Totalling CHF 1,893 million, incoming orders remained at a high level, while both free cash flow and the net financial position increased considerably to CHF 135 million (+44 %) and CHF 237 million (+77 %) respectively. These solid basic key figures were nevertheless offset by a negative development of both the operating result and net profit. EBIT sank to CHF –7 million (previous year 106 million) and net profit (loss) to CHF –25 million (previous year 74 million). The Board of Directors proposes foregoing a dividend payment to the Swiss Confederation (previous year: CHF 30 million).

The fact that RUAG recorded a loss in 2019 for only the second time in the company's history was primarily the result of an extraordinary combination of exceptional expenses that proved necessary during the reporting year. First, the planned unbundling costs reduced the result by CHF 30 million. This was compounded by a revaluation of pension fund provisions in Germany and Sweden totalling CHF 16 million due to the sharp fall in interest rates, value adjustments due to the portfolio clean-up and impairments of approximately CHF 58 million for the Dornier 228 production programme, as well as valuation adjustments and restructuring costs totalling CHF 10 million designed to reduce the extent of value added at the Emmen aerostructures site. Furthermore, the conversion of RUAG International into an aerospace group – scheduled to last two to three years – was launched. The divestments completed in 2019 had a positive impact of around CHF 21 million on the result.

Unlike the profit and loss statement, the other key balance sheet figures show a healthy and stable company. Sales exceeded two billion francs for the first time, despite certain divestitures operated during the unbundling process (June: Business Aviation Geneva and Lugano, December: ICT-Security Clearswift); incoming orders and the volume of orders reached the high level recorded the previous year, despite to some degree the palpable uncertainty of certain customers due to the unbundling decision. The structural integrity programme for the F/A-18 fighter aircraft ensured exceptionally high growth in 2018. The net financial position demonstrated a markedly increase of about CHF 100 million – primarily due to the net cash inflow from the two divestments. This meant that at the end of the reporting year, RUAG had cash totalling CHF 237 million at its disposal.

The proportion of sales generated in the civil sphere remained stable at 56 % in the reporting year, as did the share of foreign operations (63 %). By far the most important customer was the DDPS, recording a share of sales of 32 % (previous year 30 %). At the end of the year, the number of full-time positions had fallen slightly to 9,091 (previous year: 9,127). On the one hand, the number of jobs fell due to the divestitures operated while on the other hand, the improvement in net sales relating to Aerostructures, Ammotec and MRO Switzerland led to an increase.

Development of the divisions

Operational activities were uneven in 2019. Individual business units in all divisions failed to meet expectations. The stable business year of RUAG Space was characterised by the development of the new production facility for carbon fibre structures in Decatur, Alabama (US). Numerous prototypes of payload fairings were handed over to our partner, United Launch Alliance (ULA). Delivery of the first structures designed for use in space is scheduled for April 2020. The second US production facility in Titusville, Florida, reached a new level of industrialisation with a production rate – unparalleled anywhere in the world – of 30 dispensers per month for the OneWeb satellite constellation. In Europe, the 250th start of an Ariane launcher marked yet another milestone. Since the very first flight in 1979, RUAG on-board computers have controlled the rockets and protected RUAG payload fairings with 100-percent mission success. A highly promising breakthrough was achieved in Asia. The division will provide Mitsubishi Heavy Industries with the payload fairings for the new Japanese H3 launcher. In addition to investments in developing production in the US, an increase in pension liabilities in Sweden caused by significantly lower interest rates also impacted the result. This ultimately led to a decrease in both sales and the operating result (EBIT).

The Aerostructures division found itself midway through a turnaround process in 2019. Intensive work was being carried out on restructuring and stabilisation programmes at the Oberpfaffenhofen (Germany) and Eger (Hungary) sites. Driven by the Airbus single aisle programme, sales nevertheless increased again by more than 12 %. However, a loss was again recorded in 2019 due to additional valuation adjustments, impairments and provisions that had to be operated for the activities at the Emmen site. The abrupt termination of the Airbus A380 programme and falling production relating to the Pilatus PC-21 meant that a fundamental reorientation of the site was necessary. Within the framework of a transition project, the site focussed on promising core technologies such as surface treatment, composite materials, military assemblies and development activities. The renewal of the single-sourcing partnership with Airbus for another six years, relating to the delivery of sections of fuselage for the A320 family, forms a strong basis for the future. This safeguards about 80 % of current Aerostructures sales in the coming years.

The business operations of MRO International developed very unevenly, in which – with the exception of munitions production – all RUAG activities to be sold are accumulated. While the Simulation & Training and Aviation International business units achieved good or very good results, and the fields of military and civil aviation and helicopter repair and overhaul remained profitable, valuation adjustments on inventory and impairments of non-current assets totalling about CHF 58 million were necessary in the Dornier 228 production programme. Accordingly, the division clearly failed to achieve the goals set. The Simulation & Training contract for an upgrade of the Swiss Armed Forces' combat training centres together with a number of new orders for the repair and overhaul of the German Bundeswehr's NH90 helicopter are future-oriented, more than offsetting the downturn caused by the loss of a previous MRO order.

RUAG Ammotec once again displayed particularly positive developments. Thanks to a consistent market orientation and constant investments in the production facilities, there was considerably stronger growth in this division than the market as a whole. The Armed Forces & Government Agencies business unit continued to be a growth driver during the reporting year. It benefited from both the growth in the defence budget in the NATO member states and the growing demand for high-quality special munitions. An example of this is another major contract from the Dutch Police won, among other things, thanks to a patented priming composition which facilitates a forensic firing release determination. In contrast, the Hunting & Sports segment once again proved to be difficult during this reporting year, with persistent over-capacities in the US putting prices under pressure. Fortunately, a slight increase in sales was recorded in this sector. Overall, Ammotec increased sales by 7 %. The operating result (EBIT) was impacted by an increase in pension obligations in Germany and Sweden, which was caused by the significant fall in interest rates.

The activities for the Swiss Armed Forces accumulated in the MRO Switzerland division achieved a generally satisfactory result with a slight increase in sales. The MRO services for land systems and the activities falling under service level agreements (SLA) with the Swiss Armed Forces displayed positive development. In the service life extension programme for the TH98 transport helicopter, the prototype was completed and series production was launched. The structure upgrade for the Swiss Air Force F/A-18 fighter aircraft was prepared. Unforeseen difficulties in the development of the Cobra mortar system and in a project providing additional armour for armoured personnel carriers for the Belgian Armed Forces had a negative impact on the income statement.

Unbundling

The unbundling of RUAG requested by the Federal Council progressed considerably during the reporting year and MRO Switzerland will begin operations as planned on 1 January 2020. Henceforth, the business processes will run independently, the employees are completely separate from one another in organisational terms and the business-relevant data of MRO Switzerland will be transferred to the FUB system (Armed Forces Command Support Organisation). The completion of the entire data transfer will nevertheless be postponed due to the challenging scenario adopted. To achieve the highest possible level of data security, the decision was taken to fully incorporate the MRO Switzerland computer system into the security scope of the DDPS. The complete IT and legal unbundling will be completed in spring 2020.

In 2019, the organisational structures for the new units were developed and the legal entities were established. The relevant committees also determined the boards of directors and management teams of the new companies. Dr. Jennifer P. Byrne, Jürg Fedier, Rainer Schulz and Dr. Laurent Sigismondi were elected to the Board of Directors of RUAG Holding, which will oversee RUAG International from 1 January, 2020. They will support the supervisory body by providing additional know-how in the fields of international aerospace, finance, global supply chain partnerships and legal issues. Paul Häring and Markus Hutter have stood down. Prof. Sibylle Minder Hochreutener has switched to the Board of Directors of MRO Switzerland.

There was also a change at the very head of the group at the end of the year. The Board of Directors of RUAG and the CEO, Urs Breitmeier, parted company by mutual consent following the completion of the unbundling process. In recent years, Urs Breitmeier has successfully developed RUAG into an international group. The Board of Directors and Executive Board would once again like to express their gratitude to Urs Breitmeier for his deep commitment. The Board of Directors is looking for a suitable successor from outside to handle the forthcoming transformation of RUAG International into a global aerospace group. Until the new CEO takes up their role, CFO Urs Kiener has taken over responsibility on an interim basis.

Outlook

In the coming two to three years, and in addition to the economic challenges on the different markets, RUAG will focus its attention on the conversion of RUAG International into a global aerospace group, with the sale of the business units amalgamated within MRO International as well as RUAG Ammotec, the restriction of the support functions to the aerospace group and the consolidation of MRO Switzerland.

The new aerospace group will gradually have to adjust the support functions inherited from RUAG Holding to sales representing only a little more than half of those recorded during the reporting year. During this challenging transformation, additional expenses of about CHF 34 million can be expected over the next three years. MRO Switzerland will have to develop its own support functions. The dyssynergies resulting from the separation will cause costs to rise in both sub-holdings.

For all business units within MRO International and for RUAG Ammotec, the aim is to sell. The Board of Directors and Executive Board are confident that a solution can be found for all units that will be satisfactory to RUAG, its owner and the employees.

The unbundling and transformation costs that will continue into 2020 and the possible effects of the corona crisis will have a negative impact on the business results of both RUAG International and RUAG MRO Switzerland.

In 2020, the Executive Board and the Board of Directors will present the implementation plan to the Federal Council for the further development of RUAG International, as required within the framework of the unbundling. This will define all the planned steps necessary to create a streamlined, globally competitive aerospace group ready for a public flotation.

The Board of Directors and the Executive Board are looking forward to addressing the path forward together with its employees, customers, partners and the owner.

RUAG Holding Ltd.

Dr. Remo Lütolf
President of the Board of Directors

Urs Kiener
CEO a.i. RUAG Group

The Group Executive Board

Chaired by Group CEO Urs Breitmeier, the RUAG Group Executive Board comprises four CEOs of the divisions Space, Aerostructures, Ammotec and MRO Switzerland, plus the heads of the support functions Finance & Controlling, Human Resources and Legal & Secretary General. From 1 January 2020, Urs Kiener will also assume the role of CEO. Urs Breitmeier left the Group Executive Board effective 31 December 2019.

Urs Breitmeier, CEO RUAG Group,
Head of the Group Executive Board.
Left the Board effective 31 December 2019.

Urs Kiener, Chief Financial Officer, Member of the Group Executive Board.
Head of the Group Executive Board ad interim from 1 January 2020.

Dr. Peter Guggenbach, CEO Division Space,
Member of the Group Executive Board

Dirk Prehn, CEO Division Aerostructures,
Member of the Group Executive Board

Christoph M. Eisenhardt, CEO Division Ammotec,
Member of the Group Executive Board

Andreas Berger, CEO Division MRO Switzerland,
Member of the Group Executive Board

Dr. Christian Ferber, Chief Human Resource Officer,
Member of the Group Executive Board

Dr. Judith Bischof, General Counsel,
Member of the Group Executive Board

RUAG Space

The growing importance of space travel to life on Earth remains a key driver of the dynamic market environment that this sector operates in. As a leading supplier of satellites and launch vehicles, RUAG Space continues to hold a stable position and is investing in the future.

Business performance

In a challenging market environment, RUAG Space achieved an operating result of CHF 24 million (CHF 38 million) with a slight downturn in sales, amounting to CHF 339 million (CHF 377 million). The primary causes of this were delays in decision-making processes affecting new telecommunications projects. At the same time, RUAG Space continued to invest in strategic areas of growth: the US market, new products and industrialisation.

The USA represents by far the largest space market and the one with the strongest growth. RUAG Space was able to expand its business activities in the USA based on its role as a global supplier with a leading position in Europe. It made investments in its Alabama and Florida production sites, and began production projects for its customers United Launch Alliance and Airbus OneWeb Satellites. It also expanded its portfolio of electronic and mechanism products, looking ahead to the needs of future satellite constellations. As well as this, further investments were made in establishing new, more efficient production processes for thermal systems – at the Berndorf site in Austria among others – and in mechanisms for semiconductor production in Coswig, near Dresden. These steps have made RUAG stronger in the face of growing competition surrounding commercial and institutional projects.

RUAG Space achieved some important milestones in the field of electronics in 2019. EDRS-C, the European data highway satellite operated by the European Space Agency (ESA), successfully commenced operation during the year, with supercomputers from RUAG Space controlling the payload and other subsystems of the satellite. The European space telescope CHEOPS is also controlled by on-board electronics from RUAG Space. Additionally, RUAG is working together with a partner company to deliver on-board and on-the-ground electronics that will provide secure data transmission for the new space station that NASA is planning. The Lunar Orbital Platform, as it is known, is intended to provide a gateway for regular travel to the Moon from 2024 onwards. RUAG is also anticipating growth in the area of exploration through its new development office for electronic products in Denver, Colorado, which opened in 2019. As well as this, RUAG is working with new US companies on the commercial telecommunications market, including San Francisco-based internet provider Astranis. It has also been competing for contracts in European projects relating to navigation satellites and terrestrial observations. Decisions on these will be made in the coming years.

The OneWeb communications network saw the launch of its first six satellites in spring 2019. The first phase in the network of satellites being created is set to encompass some 650 satellites, with additional launches scheduled for 2020. To ensure that the satellites are released correctly, a RUAG dispenser is placing each individual one securely in position in its destination orbit. RUAG is also supplying the satellite structure. For OneWeb, RUAG Space USA produced some 750 satellite panels at its Titusville, Florida site within six months – amounting to more than 30 satellites per month, a production rate that no other facility in the world has managed to rival. Thanks to a new dispenser system from RUAG, it was also possible to place satellites for Canada's RADARSAT Constellation Mission safely in orbit. This unique vehicle launch method sent three large satellites into space and incurred lower costs in the process. RUAG structures and heat protection equipment contributed to the European space data highway project (EDRS-C) launched in 2019. In terrestrial applications, meanwhile, RUAG expanded its production of mechanisms used in semiconductor manufacturing. It produces thermal insulation solutions for the energy and medical sectors, to name a couple of examples.

In 2019, the European launch vehicle Ariane achieved a significant milestone through its 250th trip into space. This marked a special event for RUAG as well: since Ariane was first launched in 1979, an on-board computer from RUAG Space has been guiding the vehicle to its destination and a RUAG payload fairing has been protecting its precious cargo – with a successful outcome every time. At their autumn 2019 meeting, ESA ministers gave the green light to commissioning the new European vehicle, Ariane 6, which will also use RUAG Space payload fairing of around 20 metres in height. With a view to creating smoother journeys into space, RUAG Space successfully tested a new, shock-proof jettison system for payload fairings in 2019. The year also saw US launch vehicle Atlas V undertake numerous successful launches with carbon structures and payload fairings from RUAG. Every month, there are launches of several US and European vehicles equipped with RUAG adapters that secure the satellites and release them in orbit. A real highlight of the year came in the form of a contract from Mitsubishi Heavy Industries, which will see RUAG provide payload fairings for Japan's new H3 launch vehicles.

Brief profile

RUAG Space is the leading supplier of products for the space industry in Europe and has a growing presence in the United States as well. With 12 sites in six countries, the division specialises in components for use aboard satellites and launch vehicles. Its competencies fall into three areas: electronics for all space applications, mechanical and thermal products for satellites, and structures and separation systems for launch vehicles.

Customers and partners
ESA, NASA, ArianeGroup, Airbus Defence and Space, Airbus OneWeb Satellites, Thales Alenia Space, OHB, United Launch Alliance, MAXAR, Boeing, Lockheed Martin, Mitsubishi Heavy Industries, Northrop Grumman

Facts and figures

Net sales:	CHF 339 million
EBITDA:	CHF 37 million
EBIT:	CHF 24 million
Employees (FTE):	1,265
Based in:	Switzerland, Sweden, Austria, USA, Germany, Finland

Outlook

At their November 2019 meeting, European space ministers demonstrated a remarkable sense of commitment to advancing space travel in Europe – and to European industry. The European Space Agency member states resolved to enact the biggest increase that the ESA's budget has ever seen, which will bring it to more than EUR 14 billion over the coming years. Additionally, the European Union intends to invest further in Europe's presence in space, and in world-leading navigation, climate protection and communication systems. Given its position as Europe's leading space supplier, RUAG hopes to play a key role in these projects in the future.

RUAG will continue to take advantage of opportunities in specific areas of the US market. This will involve NASA's projects relating to exploration of the Moon and Mars, plus the growing market in the area of satellite constellations for telecommunications and terrestrial observation.

However, the longer the corona crisis lasts, negative effects on the business results for 2020 must be expected.

RUAG Aerostructures

In 2019, sales experienced strong growth once again as a result of the Airbus single-aisle programme. In a bid to improve the unsatisfactory profitability situation, intensive work on restructuring and stabilisation programmes was conducted at the Oberpfaffenhofen and Eger sites.

Business performance

For RUAG Aerostructures, the reporting year was primarily defined by the further increase in production rates in the Airbus single-aisle programme. The resulting 12 % sales increase to CHF 300 million exceeded expectations. By contrast, EBIT remained in negative territory at CHF –22 million (CHF –14 million), reflecting the difficulties that had been faced in previous years due to factors such as delays in transferring work packages from Oberpfaffenhofen to Eger and volume discounts taking effect at the same time. Despite this, the extensive restructuring and stabilisation programmes that the Oberpfaffenhofen and Eger sites had launched towards the close of 2018 began to bear fruit at the end of the year. Another positive outcome came in the form of cash flow and net working capital, both of which exceeded their targets.

In Oberpfaffenhofen, 2019's focus of operations was on the challenge faced by meeting the demands of the customer Airbus. This required a further increase in production rates for the A320 family to meet the target of well over 60 fuselage sections per month. As this figure is above the volume originally agreed, and the labour market for professionals is largely stagnant, some supply problems were experienced as a result and it was not possible to achieve the levels of productivity that had originally been intended. Professionals from all over Europe were recruited with the aim of resolving this issue.

As a contrast, the turnaround programme launched in 2018 continued apace during the reporting year, impacting on every key area of the business: production, the product portfolio, interaction between the sites, the supply chain, relationships with customers, business processes and HR policy. Every activity and workflow is undergoing in-depth analysis with the aim of boosting productivity and profitability over the long term. Processes are also being streamlined and production flow is being optimised with a view to achieving operational excellence. In the area of HR, meanwhile, 2019 saw the introduction of a new compensation system following successful negotiations with the works' councils and labour union. As a result of intense negotiations with the customer Airbus, it was also possible to improve prices and cost contributions as well as move work packages towards a higher degree of automation.

The Emmen site is being heavily affected by production of the Airbus A380 widebody aircraft being phased out, as announced in February 2019. To cope with this, the "Transition Emmen" project has been introduced to sharpen the site's focus on core technologies such as surface treatment, composite materials, military assemblies and development activities. Costs are also undergoing a systematic process of optimisation. The new surface treatment facility enjoyed some positive developments in 2019: as a profit centre, it has achieved its first milestones by achieving sales of around CHF 10 million and a 20 % proportion of third-party customers.

Stabilisation was the focus at the Eger site in Hungary during the reporting year. All the work that had originally been planned has now been transferred to the site and it has been possible to achieve a consistent increase in delivery reliability. Through its management system becoming certified in line with EN 9100 in October 2019, the Aerostructures site in Hungary also reached another important milestone on the road towards becoming an independent location.

Outlook

Strong growth is expected in global markets for both passenger and military aircraft. RUAG Aerostructures intends to ensure that the company will gain sustainable benefits from this growth in the future, through the restructuring projects taking place in Oberpfaffenhofen and Eger, and the transition project that has been launched in Emmen.

The Oberpfaffenhofen site is likely to see demand that is even higher than average from its main customer, Airbus. However, sales figures will be negatively affected by the ceasing production of the Canadair Regional Jet (CRJ) – a decision that was taken immediately after Bombardier's sale of the entire programme to Japanese competitor Mitsubishi in 2019. The Oberpfaffenhofen site will continue producing rear fuselage sections of the CRJ until summer 2020 and will then only supply spare parts.

In Emmen, the surface treatment facility is set to be one of 2020's growth drivers. Currently working in two-shift operation, the plan is to move it to three-shift operation over the longer term in order to maximise its capacity. The business offers potential as a service provider for third-party customers in particular. Additionally, the site will feel the benefits of series production starting on the pylons for the Swedish Gripen military jet, and production activities ramping up for components being supplied to North American customer Boeing Defence.

From Eger's perspective, the challenge for 2020 will be to gain certification as an independent aviation enterprise that is approved by the Hungarian authorities. Once this is achieved, it will operate autonomously in the areas of materials purchasing, work planning and quality control in the future. This will afford the site greater flexibility and make it easier to develop areas where optimisations could be made. The reduction in CRJ production activities is set to have a negative impact on this site as well.

Brief profile

RUAG Aerostructures is a global first-tier supplier of aerostructures for civil and military customers. Key activities include the development, production and final assembly of complete fuselage sections, wing and control surface components as well as sophisticated component assemblies and parts for civil and military aircraft. One of the division's strengths lies in managing complex supply chain networks. Among other things, it is responsible for the complete global fuselage section supply chains for Airbus.

Customers and partners
Airbus, Boeing, Bombardier, GE Aviation, Pilatus Aircraft, Saab

Facts and figures

Net sales:	CHF 300 million
EBITDA:	CHF (13) million
EBIT:	CHF (22) million
Employees (FTE):	1,506
Based in:	Switzerland, Germany, Hungary

With the division migrating to the new ERP system, it can look forward to significant improvements in its control over production and supply chains, and in the way in which its sites work together. The new system is based on SAP S/4HANA across the board and, in the coming years, will make it possible to simplify order interfaces for customers and create redesigned, leaner business processes.

However, the longer the corona crisis lasts, negative effects on the business results for 2020 must be expected.

RUAG Ammotec

RUAG Ammotec has consistently aligned itself with the needs of the market and made targeted investments in equipment and innovations over recent years, both moves that have paid off. On the whole, the division delivered much stronger growth than the market in 2019, even achieving an increase in the Hunting & Sports segment – an area that has been experiencing difficulties all over the world. The Armed Forces & Law Enforcement business unit remains the main driver of growth.

Business performance

RUAG Ammotec is looking back on another successful financial year. Sales rose by 7 % in total to CHF 450 million, a result that is far above that of the small-calibre ammunition market as a whole, which only grew by approximately 2 %. The operating result declined from 20 million to CHF 12 million. The EBIT figure's fall did not occur for operational reasons, but was instead the result of non-funded pension obligations in Germany and Sweden undergoing a valuation-related adjustment due to the significant drop in interest rates. This figure amounted to CHF 11 million.

The Armed Forces & Law Enforcement business unit continued to be a growth driver in 2019. It benefited not only from gradual growth in the defence budgets of NATO states, but also from the growing demand for RUAG Ammotec to supply high-quality specialist munitions. RUAG Ammotec has staked an excellent position for itself as a leading innovator in this area, offering a comprehensive portfolio of specialist and precision munitions. The overall growth in demand for lead-free primer elements in munitions delivered another positive outcome. For years now, RUAG Ammotec has been one of the market leaders in primer technologies that are free from heavy metals.

In 2019, the Hunting & Sports business unit had an exceptionally difficult market environment to contend with. Persistent excess capacity in the USA is exposing prices to ongoing pressure despite a slight increase in demand. On the whole, however, steady growth in the merchandise and accessories business through the company's own European distributors fortunately resulted in sales increasing slightly.

The various activities undertaken by the Industrial business unit developed at different rates. The area of the business that deals with pyrotechnic components for medium and large-calibre ammunition benefited from an increase in demand from NATO states. There was also growth in sales of components for the construction sector. To accommodate this, new equipment investments that had been made in previous years made it possible to expand capacity. By contrast, automotive industry products such as priming compositions and mixtures for airbags and belt tensioners felt the effects of the industry weakening across the globe. Munition components have experienced the same issue, and many customers in the area of OEM munitions and associated components have also been affected by a decline in the hunting and sports munitions market.

Outlook

In the years to come, RUAG Ammotec is expecting above-average growth to continue on the whole, accompanied by a further increase in profitability. Production activities have consistently been modernised over the last two years, with investments made in new equipment and upgrading existing facilities, and this will facilitate continuous growth in sales and productivity. This successful transformation strategy will continue to be pursued emphatically in 2020, with plans including new facilities for Armed Forces & Law Enforcement munitions production in Sweden and Hungary, and a capacity increase in Fürth (Germany).

The various markets in which RUAG Ammotec is active are not expected to undergo any fundamental changes over the coming years. Where the Armed Forces & Law Enforcement business unit is concerned, increases in the defence budgets of NATO states will ensure further growth. Meanwhile, the Hunting & Sports business unit will continue to feel the effects of excess capacity in its biggest individual market, the USA, over the next few years. Despite this, RUAG will aim to deliver slight growth by continuing to expand its trade activities and engaging in targeted expansion of individual, regional European markets where it still sees potential. In the Industrial business unit, 2020's growth drivers are likely to come in the form of components for the construction industry and for medium and large-calibre ammunition – while the component business for other small-calibre ammunition manufacturers and the automotive sector will probably face yet more challenges from an extremely difficult market environment. Another contributor to profitability in the future will be the project that is gradually replacing the various goods management systems at all of Ammotec's sites with a uniform ERP system based on the SAP S/4HANA platform. This project began in 2019 and completion is envisaged for 2022.

However, the longer the corona crisis lasts, negative effects on the business results for 2020 must be expected.

Brief profile

RUAG Ammotec, with its Hunting & Sports, Armed Forces & Law Enforcement and Industrial business units, is the European market leader in small-calibre ammunition, pyrotechnic elements and components. Its precision ammunition for special forces is in high demand worldwide. The division is also the leader in heavy-metal-free primer technologies as used in actuator cartridges in the construction industry and automotive safety system applications. The product range also includes large-calibre training systems, hand grenades and environmentally safe disposal of pyrotechnic products.

Customers and partners
Swiss Armed Forces, German Bundeswehr, international armed forces in the NATO environment, law enforcement and security organisations, hunters and sporting marksmen across the world, industrial partners

Facts and figures

Net sales:	CHF 450 million
EBITDA:	CHF 30 million
EBIT:	CHF 12 million
Employees (FTE):	2,324
Based in:	Switzerland, Germany, Sweden, Finland, Hungary, USA, Austria, UK, France, Belgium, Italy

RUAG MRO International

In 2019, RUAG MRO International focused on maintaining continuity, stability and improvement in its international activities intended for divestment. Market positioning was optimised in all business units and sales figures performed as expected, with just a few downturns. Extensive value allowances and impairments had to be recorded in EBIT.

Business performance

For the newly formed RUAG MRO International division, the 2019 financial year went according to plan with only a few exceptions. Compared to the previous year, sales experienced a decline to CHF 243 million (from CHF 272 million). This was primarily attributable to the sale of the civil Business Aviation activities within Switzerland. It was also necessary to accept significant reductions in the area of EBIT, which fell by CHF 39 million to CHF –63 million. This was almost exclusively due to valuation allowances and impairments, which had to be implemented within the Dornier 228 manufacturing programme due to quality issues identified with a supplier.

In 2019, the focus of operations was on preparing the individual activities as thoroughly as possible for sale or joint venture partnership status. Primarily, this period of transformation meant ensuring that continuity, stability and improvement would be maintained. Successful results were achieved in the process, thanks in no small part to transparent communication with customers, partners and employees alike.

Simulation & Training put in a solid performance in 2019: this business unit is the largest within MRO International and is currently looking for a joint venture partner. Due to customer-related delays, volumes were slightly down in the Swiss business activities involved in maintaining and operating the Swiss Armed Forces' combat training centres. Capacity utilisation remains at a healthy level, however, due to the customer being extremely satisfied with the performance so far and the upcoming facility upgrade work. A slight decline was also seen in business involving the German Bundeswehr and the French Army, where efficiency adjustments had to be made in order to create a more secure situation for future activities.

The Oberpfaffenhofen site recorded a range of different results: while MRO services for military helicopters, business jets and the Dornier 228 achieved a stable volume and put in a successful performance overall, it was also necessary to accept some losses relating to Dornier 228 manufacturing activities, due primarily to quality issues identified with a supplier. By contrast, the Business Aviation unit performed well. It was able to boost its level of capacity utilisation and a buyer for its Geneva and Lugano sites in Switzerland was found during the reporting year, in the shape of the French company Dassault Aviation. The Military Services unit, which chiefly provides maintenance services for German Bundeswehr helicopters, achieved a steady level of capacity utilisation and gained new business. Customer support and MRO (Maintenance, Repair and Overhaul) activities for the Dornier 228 also recorded a satisfactory performance, achieving results such as the maintenance contract with the Italian Army being renewed.

The Aviation International business unit, which provides MRO services for military aircraft at its sites in Australia and Malaysia, performed better than expected during the reporting year, with Australia in particular seeing an increase in both volumes and margins. The site is also set to maintain a healthy position in the future thanks to its extensive involvement in the US-led Joint Strike Fighter (F-35) programme in the Pacific region.

Outlook

In 2020, RUAG MRO International will be focusing its efforts heavily on searching for partnership opportunities. The plan is to complete the entire divestment process by the end of 2021.

There are different outlooks ahead for business prospects in 2020 and beyond. Simulation & Training has several long-term projects in the pipeline, with an extensive upgrade of combat training centres planned in Switzerland and large-scale tender processes coming up in both Germany and France. New markets are also opening up in Asia and the USA, where the division won its first contract during the reporting year.

At the Oberpfaffenhofen site, the Military Aviation unit is expected to achieve healthy levels of capacity utilisation due to new orders for NH90 helicopters. Extensive tendering processes are due to begin in this area, too. The aim for Business Aviation will be to ensure continued improvement, something that should be helped along by employees in Business Aviation and Military Services being mutually qualified to work in both units. This flexible deployment of staff will make it possible to manage fluctuations in Business Aviation volumes more efficiently. MRO services for the Dornier 228 are set to remain at a steady level over the long term, due to the 150 aircraft in operation across the globe.

The future of international activities looks positive, particularly in Australia. In addition to the F-35 programme, which is set to grow in the coming years, Super Hornet (F/A-18 E/F) aircraft will also ensure an increase in sales in the future.

Brief profile

RUAG MRO International is an independent supplier, support provider and integrator of systems and components for civil and military aviation across the globe. As the manufacturer (OEM) of the Dornier 228, a versatile aircraft designed for special missions as well as passenger and cargo transport, RUAG's focus is on providing customer and OEM support in this particular area. RUAG MRO International also develops simulation and training facilities for live, virtual and constructive training (LVC training) delivered to international security and armed forces.

Customers and partners

Boeing, Bombardier, Embraer, Honeywell, Lockheed Martin, Ravenswood Solutions, Rockwell Collins, Pilatus, United Technologies, selected security and armed forces, plus authorities and civil security organisations worldwide

Facts and figures

Net sales:	CHF 243 million
EBITDA:	CHF (44) million
EBIT:	CHF (63) million
Employees (FTE):	1,152
Based in:	Switzerland, Germany, France, Malaysia, Australia, United Arab Emirates

RUAG MRO Switzerland

For RUAG MRO Switzerland, 2019 was a financial year that presented challenges. In spite of the unbundling process, the division achieved a positive result on the whole and was able to meet the expectations of both its owner and its customers.

Business performance

In the 2019 financial year, RUAG MRO Switzerland recorded net sales of CHF 625 million. With an increase of CHF 16 million – compared to the previous year – the division outstripped expectations. This excellent result was primarily due to strong order intake and the additional volumes generated by all the business units.

However, the division was unable to live up to the previous year's EBIT figure. Its earnings before interest and taxes came to CHF 54 million (CHF 79 million). Significant cost discrepancies in two major projects, valuation allowances and settlements of various old liabilities were all major contributors to this result.

Following the Swiss Federal Council's decision to unbundle RUAG both legally and structurally as of 1 January 2020, the activities of the most recent financial year were fully dedicated to this exercise. MRO Switzerland's primary aim was to ensure that its business operations remained financially profitable and professional despite the additional challenges being faced. The division ultimately achieved this successfully, with every single business unit making a valuable contribution.

Under the TH 98 Cougar upgrade programme RUAG MRO Switzerland is modernising these transport helicopters of the Swiss Air Force. The prototype was brought up to the latest technical and operational level during the year under review. The upgrade includes partial or complete renewals of e.g. the flight control system, the navigation and communication equipment as well as of the integrated self protection system. To avoid additional downtime of the fleet, the helicopters will undergo a total overhaul in parallel to the upgrad work. The modifications to the series are set to continue until 2022 and will result in that the facilities will have to work at a high capacity level.

In 2019, RUAG MRO Switzerland also undertook value retention work on pontoon bridge 95. The project focused on replacing all the rubber parts, performing a general overhaul of the hydraulic system, and replacing the oil that the bridge had previously used with a biodegradable hydraulic variety. RUAG MRO Switzerland will also be taking on the task of assessing the road traffic registration status of converted semi-trailers. A total of 55 bridge modules, 81 semi-trailers and 24 ramp modules are set to undergo value retention and maintenance work by 2021.

The business activities affected by service level agreements (SLAs) with the Swiss Armed Forces also performed well. Within the context of these activities, RUAG Defence primarily ensures the operational capability of the systems used by the Swiss Armed Forces. This includes maintaining and repairing highly complex reconnaissance, command and control, and radar systems.

The MRO Switzerland division also recorded a good performance internationally in 2019. As part of the Very High Readiness Joint Task Force 2023 (VJTF 2023) procurement programme, the German Bundeswehr is overhauling equipment including the communication infrastructure of the Puma armoured personnel carrier. The division is contributing to this by providing the Tactical Vehicle Switch (TVS), which enables radio communication between armoured personnel carriers and infantry troops. As well as this, the TVS ensures that radio equipment is networked with communications equipment in vehicles.

Outlook

In the 2019 financial year, RUAG MRO Switzerland took steps to ensure that it would be able to continue fully satisfying the high demands of its national and international customers in the future. However, the division still faces numerous exciting challenges. The coming year will see an unwavering focus on completing the unbundling project, key elements of which include migrating all its corporate data to a secure new IT infrastructure and adapting and harmonising internal processes.

In 2020, developing the organisation in a way that reflects the owner’s strategy will once again be a priority. Continuing with these efforts will bring benefits such as optimised costs and more transparency in dealings with the main customer.

The 2020 financial year will also continue establishing RUAG MRO Switzerland as a strategic, innovative technology partner for the Swiss Armed Forces with a view to the long term. Attaining this goal will require steps such as continuing to develop the existing corporate strategy. The portfolio of products and services will also be aligned with the new owner’s strategy.

RUAG MRO Switzerland will act as an independent company from mid-2020 onwards. This development will also be reflected in a new visual presence that will see the company take on a new logo and modernise the entire image it presents to the world. In the wake of the unbundling process, this will serve as a true sign that a new era is dawning.

Brief profile

RUAG MRO Switzerland makes a key contribution to Switzerland’s security. This future-oriented technology partner focuses primarily on the life-cycle management, operation and availability of military systems – especially for the Swiss Armed Forces. Its comprehensive portfolio of products and services includes unique subsystems and components for tracked and wheeled vehicles, fighter aircraft, military helicopters and anti-aircraft systems. It also provides reliable information and communication solutions and a full range of maintenance and repair services.

Customers and partners
National and international armed forces, public authorities and civilian security organisations

Facts and figures

Net sales:	CHF 625 million
EBITDA:	CHF 62 million
EBIT:	CHF 54 million
Employees (FTE):	2,409
Based in:	Switzerland, Germany, USA

Corporate responsibility

In 2019, RUAG recognised its own corporate responsibility through a number of activities. This meant that issues such as ensuring fair employment conditions, supporting employees effectively, safeguarding staff health and safety, and handling environmental resources in a sustainable way took centre stage.

RUAG believes that its own corporate responsibility as an employer, as well as with regard to society and the environment, is one of the foundations on which sustainable economic success is built. As an international provider of defence applications, its corporate responsibility does not just include conventional roles in economic, environmental and social matters; it also maintains a sharp focus on business relationships. This includes a commitment to ensuring that all military applications, irrespective of where they are produced, comply with the Swiss export regime, the principles of Swiss foreign policy and the framework of international law. This area of corporate responsibility is laid out in more detail in the section on compliance.

In 2019, RUAG continued to forge ahead with its corporate responsibility in the economic, environmental and social spheres in all units of the Group. To do this, RUAG concentrated its activities on key areas: equal opportunities and fair compensation, training and staff support, health and safety, plus environmental protection and environmental sustainability.

Fair, sustainable employment conditions

Key to RUAG's economic succes and its responsibility towards society is the honest and fair way in which it interacts with all its employees. This is built on fair employment conditions, promoting diversity in all its forms and the principle of equal pay for equal work. Once again, RUAG's efforts in this area are endorsed by the outstanding ratings it receives from students and professionals in the prestigious employer rankings carried out by independent market research company Universum. Swiss engineering students have ranked RUAG in 11th place and professional engineers as high as 7th place.

What makes RUAG particularly attractive is the way in which it compensates all its employees fairly. To maintain this, RUAG's wage structure is reviewed regularly by the Swiss Association for Quality and Management Systems (SQS). As part of this process, the SQS analyses the salaries of all employees using Logib – a wage equality tool from the Swiss Federal Office for Gender Equality. In 2019, it was able to reissue the Fair Compensation certificate. In addition to compensation regardless of gender, value is also placed on sharing out an appropriate portion of the profits gained from efficiency measures with employees. In the reporting year, RUAG decided together with the workers' representatives to increase the wage bill by a total of 1.15 %. This is made up of a general wage increase of CHF 650 (for full-time workers) and a 0.5 % comprehensive budget for individual pay rises.

A second life for PCs and laptops

If computers no longer satisfy company requirements and need to be discarded, that does not mean they are no longer useful. The foundation Stiftung AfB social & green IT gives second-hand PCs and laptops a new lease of life, reliably deleting all data in the process and also taking charge of recycling any appliances that cannot be reused. Not only is this great for the environment, it also fulfils the foundation's mission to create work for disabled people. As a partner of the foundation, RUAG gave 110 computers a new lease of life in 2019, saving an equivalent of 7,611 kg CO_2 in the process and helping to integrate a person into the world of work.

Effective investment in talent and young people

Developing and supporting employees is one of the cornerstones of RUAG's long-term commercial success. This is illustrated by RUAG's commitment to Switzerland's Digital Day initiative, the third instalment of which was held in 2019. The tagline for this year's event, which takes place across the country and is designed to promote Switzerland's digital transformation, was 'Lifelong Learning'. Through its participation in the event, RUAG has pledged to promote lifelong learning within the company and to invest in further training programmes for employees.

The Group has placed particular emphasis on training and nurturing young professionals ever since it was first founded. In 2019, RUAG counted a total of 416 apprentices in its ranks, 319 of whom are in Switzerland.

One example illustrating RUAG's significant investment in training apprentices is its regular success at national and international professional competitions. A silver medal and a certificate of excellence from the WorldSkills global championships in Kazan, Russia, were particular highlights in 2019: here, Lukas Muth achieved a fantastic result of second place in CNC lathe skills. Simon Herzog, meanwhile, was awarded a certificate of excellence for his outstanding performance in the construction skills discipline.

In focus: Promoting e-mobility

E-mobility is a crucial building block in creating a sustainable future. In order to equip RUAG sites with the right charging stations, RUAG Real Estate has entered into collaboration with Swiss specialist Green Motion. The infrastructure in place at RUAG premises are becoming part of the provider's Switzerland-wide network, which comprises more than 1,400 stations. RUAG staff benefit from special conditions through this initiative, receiving a free subscription to the Green Motion network and benefiting from a special rate. The first charging station was commissioned in Emmen in September 2019.

RUAG's TalentsDay event also held widespread appeal, with over 460 young people and their parents taking the opportunity to find out about RUAG's basic training provision at eight locations across Switzerland. The company also participated in Switzerland's National Future Day (Nationaler Zukunftstag) on 14 November, which saw it put together individual programmes for over 190 visitors at twelve locations. A highlight for all apprentices is the week-long apprentice trip. 2019 marked the eleventh year that the trip has taken place, with the village of Fiesch in the Swiss canton of Valais serving as the base for the week's activities. There, the trainees were able to dedicate themselves to a range of different projects, which included making a downhill track, repairing an old alpine water pipeline (called a Suone in Swiss German) and dismantling a snowdrift protection wall.

Just as it does for its apprentices, RUAG provides regular, ongoing support to students – whether indirectly via joint research and development projects with universities or directly in the form of focused support for individual projects. One example of where this was clear to see was the Austrian national stage of the European CanSat competition. Since 2018, RUAG Space Austria has been providing substantial support to make this exciting and inspiring event possible for Austrian school pupils aged 14 and over. In the competition, the aerospace engineers-to-be must fit all the subsystems needed in a satellite – such as a power supply, sensors and communications systems – into a housing that is the size of a drinks can.

RUAG supports African Apes Foundation

Chimpanzees are threatened with extinction due to poaching and the loss of their natural habitat. Organisations like the African Apes Foundation help authorities to save orphaned baby apes and animals that have been caught illegally, giving them a new life in rehabilitation centres. RUAG is supporting the charity's work in two ways: firstly, the Dornier 228 aircraft and the crew from KASAS, a Kenyan air charter company, have been deployed for the difficult rescue operations in the impassable African bush. Secondly, RUAG launched a charity appeal for the chimpanzees in 2019 and showcased this in Love Dornier228 magazine, which is aimed at Dornier 228 enthusiasts across the globe. RUAG itself also gave generously to the appeal.

Health and safety in the spotlight

Health and safety are key areas of responsibility that RUAG has towards its employees. Since 2017, travel security and other issues have been strengthened through cooperation with specialist partner International SOS. In terms of healthcare in 2019, RUAG shared the costs associated with initiatives like annual flu vaccinations and subsidised sports activities for employees, such as the entry fee for the B2Run Swiss Company Run in Bern and Zurich.

Numerous improvements for the environment

Back in 2015, RUAG made a commitment to the Swiss Federal Office for the Environment to reduce its annual CO_2 emissions from the heating installations in its Swiss buildings by 189 tonnes to 3,807 tonnes by 2020. It was able to meet this target as early as 2016, reducing its CO_2 emissions by 330 tonnes. 2017 saw a further reduction in emissions by more than 448 tonnes of CO_2, followed by yet another reduction in 2018, this time by 283 tonnes compared with the previous year. In total, RUAG reduced its CO_2 emissions by a total of 1061 tonnes between 2016 and 2019 – some 872 tonnes more than it had committed itself to. CO_2 was reduced primarily due to the changeover of the dual fuel burner system in Emmen from oil to natural gas.

Added to this is the environmental performance that RUAG Environment is achieving through recycling reusable materials. In 2019, alongside other savings, approximately 42 tonnes of climate-damaging refrigerants were recovered from refrigeration appliances. This is the equivalent of preventing 110,000 tonnes of CO_2 emissions. RUAG managed to achieve a recycling quota of 80 % when processing 28,000 tonnes of waste electrical and electronic appliances. In mid-2019, RUAG Environment processed its 2.5-millionth compressor appliance since the facility was first commissioned in 1995. By recycling CFCs from disused refrigeration appliances, it was possible to conserve a total of 5 million tonnes.

Travel Risk Management: Tighter security for visits abroad

When it comes to staff who need to travel abroad for their work, RUAG takes its responsibility very seriously. To provide the best possible support for employees before and during their stay abroad, Travel Risk Management works closely together with its partner, International SOS. With around 11,000 staff, this organisation is present in over 90 countries and provides a hotline plus the International SOS Assistance app, alongside extensive country reports and risk assessments. When travelling to high-risk countries, employees are asked to register their location via the check-in button on the app. This enables the International SOS team to help in an emergency and ensure that no employee is in any danger or injured.

Compliance

As part of the Group programme Integrity@RUAG, 2019's activities focused on trade compliance, antitrust matters and protection of personal data. In addition, the Compliance and Risk Management organisations underwent preparations for the unbundling process.

The focus for Compliance during the year was the organisational activities necessary for RUAG's unbundling process, which made significant demands on resources. At the same time, the company concentrated its efforts on developing the Group programme Integrity@RUAG, launched in 2017 – just as it had done in previous years.

Strict requirements for compliance

Compliance is an integral part of risk management at RUAG. As an enterprise owned by the Swiss Confederation, RUAG is committed to upholding particularly high ethical principles going beyond compliance with all guidelines, international agreements and domestic laws. All senior managers, members of the Board of Directors and employees are expected to adhere to a strict policy of zero tolerance to corruption. Swiss export control requirements on military equipment and dual-use goods must be complied with not only by RUAG's Swiss subsidiaries, but also by all foreign subsidiaries. Openness and transparency in respect of government agencies, the public and within the company are core elements of compliance at RUAG. Integrity@RUAG, a multi-year Group initiative launched in 2017, has ensured that compliance is systematically embedded into the entire Group. This means that the project phase has now been completed and compliance work has been integrated into everyday business processes.

Focus on improving trade compliance and integrating it into the company

Compliance with all export and trade regulations is a basic requirement for all of RUAG's business activities. In 2019, the Trade Compliance Assessment programme – which had been developed in the previous year – was carried out at all sites identified as relevant based on a risk assessment. The sophisticated processes and structures of the former Aviation Division formed the basis for assessing the current state of affairs at the sites and identifying potential areas of improvement. All the organisational units will be expected to operate at this high level in future. With this in mind, particular attention was given to analysing processes and how regulations regarding export control, sanctioned party list screening and customs processes were dealt with in practical terms. The assessment revealed that the divisions are working smoothly, with the majority of requirements already being met. Room for improvement was identified primarily in areas concerning the completeness of documentation and the definition of roles. Based on the analyses, the company has now defined measures that are being implemented in order of urgency. An e-learning programme about export control and customs regulations was developed in the reporting year, and will be rolled out in 2020 to all employees concerned. It focuses on subjects such as the consistent implementation of the Swiss Federal Act on Private Security Services Provided Abroad (PSSA). Trade compliance is enshrined in the company for the long term due to a completely revised and updated Group directive issued in January. This sets out the organisational principles and rules that apply to the entire Group.

Strict policy of zero tolerance to corruption

With the aim of consolidating the Group's strict anti-corruption principles in day-to-day business, an e-learning programme was used to train all employees with an IT workstation during the reporting year. This training programme works with practical examples and is available in four languages: English, German, French and Italian. Completing the programme, together with programme-based monitoring, ensures that all employees know how the Group's anti-corruption directive (approved last year) has to be implemented in the day-to-day running of the business.

Antitrust law initiative launched

Introduced during the reporting year, the antitrust law initiative aims to ensure complete compliance with all legal antitrust provisions. In particular, it aims to increase awareness of the fact that relevant violations of antitrust law will result in significant economic damage.

A Group directive provides the basis for the activities relating to this, indicating the areas that are pertinent to day-to-day business and naming concrete actions that are not permitted or should only be performed with extreme caution. The directive is based on specific risk assessments that were carried out for all divisions. At all the sites for which this is a significant subject, workshops were conducted with managers, as well as all Sales, Marketing, Purchasing and Finance division employees who are either in direct contact with customers, suppliers and competitors or who make decisions that impact on the company's behaviour in competition. These workshops explored the content of the directive in depth, using concrete and practical examples adapted to business cases that are relevant to RUAG.

Data protection training and establishment of new structures

Data protection continued to be reinforced in 2019. The aim is that all personal data of employees, partners and other stakeholders is effectively protected from unauthorised access and that the whole Group complies fully with the EU's General Data Protection Regulation (GDPR). This reporting year saw the development of an e-learning programme that will be mandatory for all RUAG employees with an IT workstation. The programme will train staff in how to deal correctly with their own personal data, such as their addresses, bank details, social insurance details or health information. It will also look at how to handle the personal data of employees, colleagues, business partners and other external parties.

The organisational basis for ensuring compliance in the new company structure, in force from 1 January onwards, was set up in 2019 with the two legally independent companies MRO Switzerland and RUAG International. The activities carried out as part of this process included detailed compliance procedures and risk assessments for the new units. As the former organisational unit for Risk Management and Compliance will in the future be part of RUAG International, the emphasis was on reorganising the structures for the future RUAG MRO Switzerland company and on training the relevant staff.

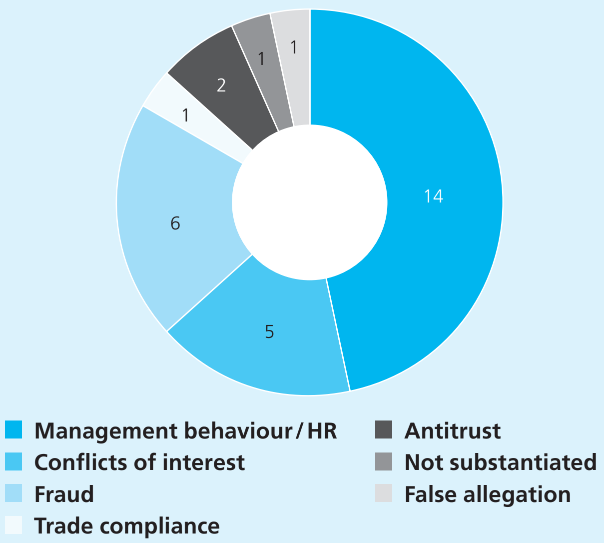
Whistleblower system

RUAG's whistleblower system has been active since 2014 and is a key part of ensuring global compliance. The system can be used by all employees as well as external parties to report possible irregularities and misconduct. Reports made within the system are seen only by the Compliance Team and are kept confidential if requested.

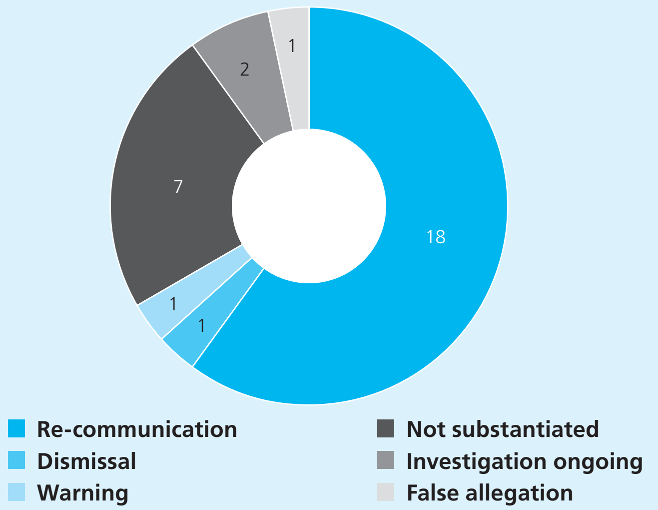
The system received a total of 30 reports in 2019. Twenty-nine reports came from employees and one came from an external informant, representing a total reduction of 36 % compared with 2018. However, the number was still higher than the figures recorded in the preceding years. In 2018, additional reports are likely to have been triggered by the Code of Conduct workshops that took place throughout the Group that year.

The investigations launched as a result of these reports led to concrete measures being introduced in 2019 in relation to two cases. Twenty-six reports resulted in no advanced actions being taken. In two cases, internal investigations are still ongoing (as of the end of 2019). 2019 was another year in which the whistleblower system brought about numerous improvements in the area of compliance. Some of these improvements would otherwise not have been possible, or would have been subject to delays.

Categories of allegations



Decisions/sanctions taken



Risk management and HSSE

The newly formed role of Global Risk & HSSE Manager (where HSSE stands for health, safety, security and environment) reinforces the Group's organisational structures relating to risk management. The core tasks of this role include setting up a comprehensive enterprise risk management system in line with ISO 31000 and establishing standard HSSE processes.

For RUAG, the company-wide risk management system represents a crucial element of sustainable business success.

The risk management system was strengthened in 2019 among other measures by the creation of the new Global Risk & HSSE Manager role at Group level. The remit of this role includes setting up a comprehensive enterprise risk management system that operates in line with ISO 31000 and incorporates every aspect that is relevant to the Group, from operational and legal risks to physical safety, IT security, health, the environment, compliance, reputation and financial risks. In addition to establishing this role, the company has improved organisational structures that will enable HSSE to be promoted throughout the Group in a uniform, systematic way.

Bottom-up approach to a Group-wide risk culture

RUAG firmly believes that an effective risk management system with an entrenched role within the Group must include all levels of the hierarchy and all areas of activity. This is why the integrated risk management system is set up using a bottom-up approach. First assessments were carried out in the divisions with the aim of fully understanding the existing structures, tools and processes, as well as the needs of various stakeholders. Recommendations and measures were derived from these impact analyses and are now being implemented in stages. In the future, the aim is that the process of dealing with risks – which involves identification, assessment, outsourcing, mitigation, treatment, monitoring, reporting and communication – will be based on a methodology that is consistent across the whole Group. This will bring about benefits including more effective management of the entire risk portfolio and more profound business decisions.

HSSE directive and new Board

A specific structure that has been established in the area of HSSE also aims to implement standardised processes across the whole Group. RUAG is committed to boosting its HSSE activities to an international state-of-the-art level. The role of the HSSE Manager now incorporates the various roles that had previously been assigned within the security, environmental protection and quality management divisions, based on where they had originated. On the new HSSE Board, which is headed by the Global Risk & HSSE Manager, HSSE representatives make decisions at Group level.

The unified structures and processes are set to play a key role in promoting and improving the understanding of HSSE-related matters, and bringing them to bear within the Group.

Unbundling and new strategic focus

The Swiss Federal Council has defined the strategic goals up until 2023 and specified the task of unbundling RUAG. In 2019, the Group prepared all its organisational structures for the separation of activities into two independent companies from 1 January 2020 onwards. The final part of the legal unbundling process is expected to take place in May 2020.

In March 2018, the Swiss Federal Council decided to combine the RUAG business units that work almost exclusively for the Swiss Armed Forces into a new company and completely separate this from RUAG's other activities. The concept for the unbundling was approved in June 2018. Under the umbrella of a holding company, the Group will be organised into two new separate companies: RUAG MRO Switzerland and RUAG International. RUAG MRO Switzerland, as the material centre of excellence, will ensure the Swiss Armed Forces are provided with reliable, cost-effective equipment in a way that is open to public scrutiny, all while remaining wholly owned by the Swiss Confederation. RUAG International will take care of all other activities, the majority of which are performed for civilian customers and international third-party customers.

By completely unbundling the IT systems of both RUAG units, RUAG MRO Switzerland can meet the security standards of the Swiss Armed Forces, which is absolutely essential for ensuring reliable service provision in all threat situations. In addition, the further development of the existing Space and Aerostructures Divisions, which involves merging them into a single Aerospace Group, will require substantial investment in future. Accordingly, the Swiss Federal Council has decided to fully privatise this area.

In 2019, the Swiss Federal Council specified its mandate to RUAG. It was decided in March that RUAG International should be developed into an Aerospace Group and privatised in the medium term. In August, the Swiss Federal Department for Defence, Civil Protection and Sport (DDPS) was issued the mandate to found a new holding company (BGRB Holding Ltd), which would be responsible for overseeing the implementation of the unbundling and further development processes. The official foundation ceremony took place on 15 November 2019 and was attended by President of the Federal Council Ueli Maurer and Federal Councillor Viola Amherd.

Organisational structures established and infrastructures unbundled

In 2019, RUAG prepared and established the structures for the organisations to be unbundled in all its business units. To achieve this, it formed legal entities that enable the separation of liability between MRO Switzerland and RUAG International and, at the same time, meet the specification that all investments of the Swiss Confederation must be kept in a holding company. Although the companies will be legally active in May 2020, each of them is already working to bring its activities in line with the future corporate structure.

RUAG MRO Switzerland

RUAG MRO Switzerland focuses on the life cycle management of the current and future systems for the Swiss Armed Forces. As a material centre of excellence, RUAG MRO Switzerland is also responsible for maintaining and developing the necessary engineering and ICT expertise as well as conducting research and development activities on behalf of the Swiss Armed Forces. Any third-party business is required to create synergies with the activities carried out for the Swiss Armed Forces; furthermore, the added value it brings must benefit Switzerland and its total must not exceed a benchmark amounting to 20 % of total turnover.

The new company commenced business under the leadership of the former CEO of RUAG Defence, Andreas Berger, on 1 January 2020. The legal unbundling process is scheduled for May 2020. The bulk of the unbundling process is expected to be completed in July 2020. The future organisational charts of the central support functions for Finance, Human Resources, Legal & Compliance and IT have already been communicated.

RUAG International

As a result of the Swiss Federal Council's decision and, consequently, the new strategic focus on the Aerospace business unit, RUAG International will be made up of both the Aerostructures and Space business divisions in the medium term. RUAG Ammotec is to make additional operational improvements so that it can be sold to another company that is prepared to continue operating the Thun (Switzerland) site. A joint venture is being sought for the current Simulation & Training business unit to ensure that operations and further development of the Swiss combat training centres can continue. Efforts are also being made to find solutions that will provide long-term security for jobs in aeroplane production, military aircraft maintenance and MRO services for business jets at the Oberpfaffenhofen site. Some initial success has been achieved on that front with the sale of the Business Aviation locations in Geneva and Lugano to the French company Dassault Aviation, and the sale of the cybersecurity business to the US company HelpSystems.

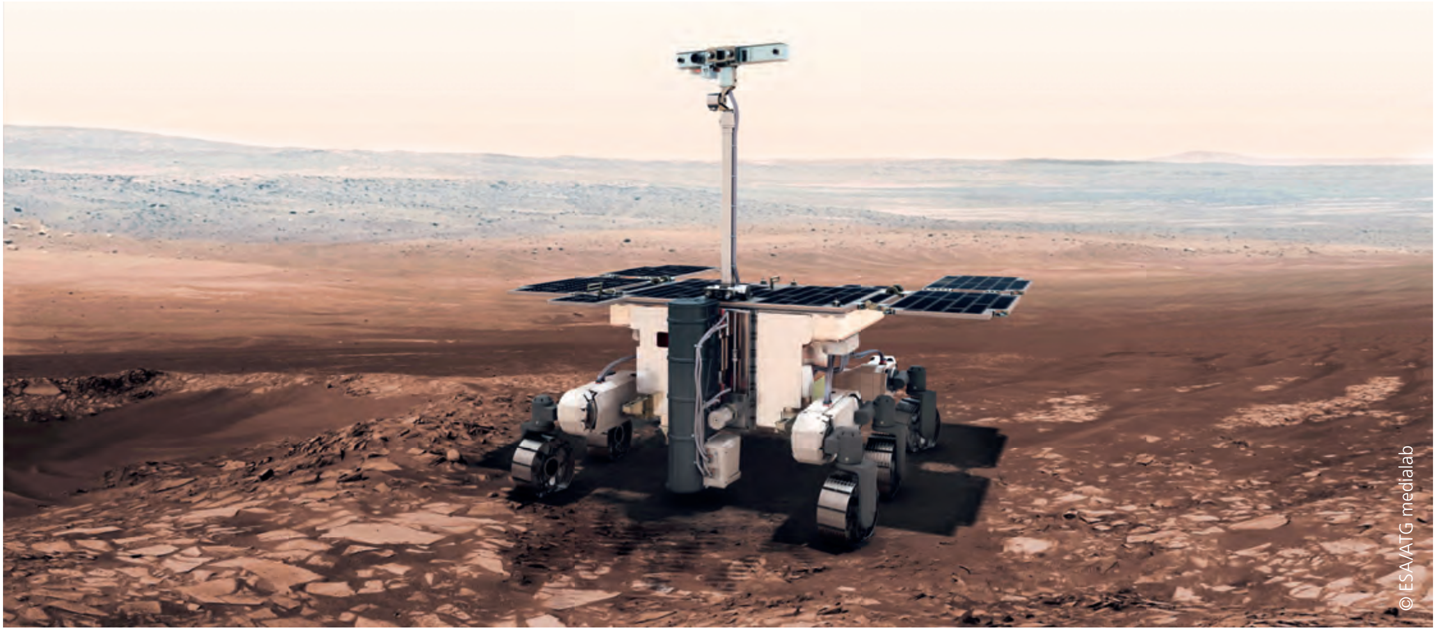
In 2019, the business model was defined and the organisational structures established for the Aerospace Group, which became operational on 1 January 2020, with the members of the current Group taking up management roles. Following on from the departure of previous CEO Urs Breitmeier at the end of 2019, Urs Kiener, formerly the CFO, has additionally taken over leadership of the Group ad interim until a successor is appointed. The Finance, Human Resources, IT and Legal & Compliance support functions will be managed centrally with the aim of helping the Group to deliver what it has to offer in a uniform, focused manner. The structures associated with this were established in 2019.

Strategic goals defined for 2020–2023

The Swiss Federal Council works on behalf of the Confederation, attending to its interests as the owner and its rights regarding the holding company as the sole shareholder. It sets out the goals that the owner of the holding company wants to achieve, working in four-year cycles each time. In the period 2020 to 2023, there will be a particular focus on ensuring the service provision for the Swiss Armed Forces is on schedule, cost optimised and high quality, on preparing the Group for the privatisation of its international activities, and on completing the unbundling process by the end of 2021 at the latest. The Swiss Federal Council has also defined the applicable frameworks for all companies in more detail, in the areas of risk management, compliance, environmental sustainability, HR policy based on a social partnership, promoting vocational training, compensation schemes and reporting. Indicators have been defined in order to verify strategic targets and manage the holding company.

Future of the RUAG brand

The division of the company into two separate companies also means the RUAG brand itself is being unbundled, something that has been accompanied by the decision to transfer the name from RUAG to RUAG MRO Switzerland. To help the new RUAG company position itself appropriately in the market, the brand presence will be adjusted both internally and externally in line with the strategic focus of RUAG MRO Switzerland. A new brand is being developed for RUAG International, with the aim of representing the strategy and portfolio of the future Aerospace Group in the best possible light.



High-tech solutions for missions to the Red Planet

The cutting-edge ExoMars rover vehicle will commence its search for water on the surface of Mars in mid-2020. RUAG Space had a major role to play in its development and testing.

Although Earth and Mars have little in common, the existence of water has led Mars to be considered a potential habitat. The ExoMars project being conducted by the ESA and Roscosmos is setting out to answer the question of whether there really is life on the Red Planet. To help find the answer, in recent months RUAG Space has been playing a major role in the ExoMars 2020 mission from its position as Europe's leading supplier of products for the space industry. RUAG has supplied the rover computer that processes all the data, controls the module and communicates with the ground control centre. The camera mast, measuring more than a metre long, the rover's central chassis structure and a structure for transporting the rover are all from RUAG Space as well.

A model of the rover has undergone extensive testing at RUAG Space's site in Zurich under conditions mimicking the sandy landscape found on Mars. In the test centre there, the rover was exposed to extreme strain such as vibration and shock tests, temperature fluctuations and simulated dust. The vehicle passed with flying colours and is now waiting to start its mission in mid-2020.

All success stories at www.ruag.com/successstories

Moving into the future through standardisation and testing

In the aviation sector, nothing has a higher priority than safety. Through its management system becoming certified in line with EN 9100, the Aerostructures site in Hungary has reached an important milestone.

RUAG Aerostructures' Hungarian production site has been an integral part of its capacity and action plan since 2017. Located in the city of Eger, the site has undergone continuous development in line with an in-depth plan – moving it from an extended workbench to a certified aviation enterprise. In October 2019, testing facility TÜV Nord confirmed that it had successfully made this huge step.

Gaining this certification, which was specifically developed for the aviation industry, now puts the site in a position to instil additional confidence in its customers and meet the requirements of aircraft manufacturers so that the company can be acknowledged as an independent manufacturing business. The certification is also a vital step in ensuring that the relevant authorities recognise the site as an independent manufacturing business.

Today, Eger manufactures side shells, floor structures, pressure bulkheads and seat rails. However, the Oberpfaffenhofen site in Germany still currently delivers structural parts to end customers as it is certified in line with EASA Part 21G. For the Eger site, obtaining EASA Part 21G approval is the final key hurdle – and one that it hopes to clear in 2020.

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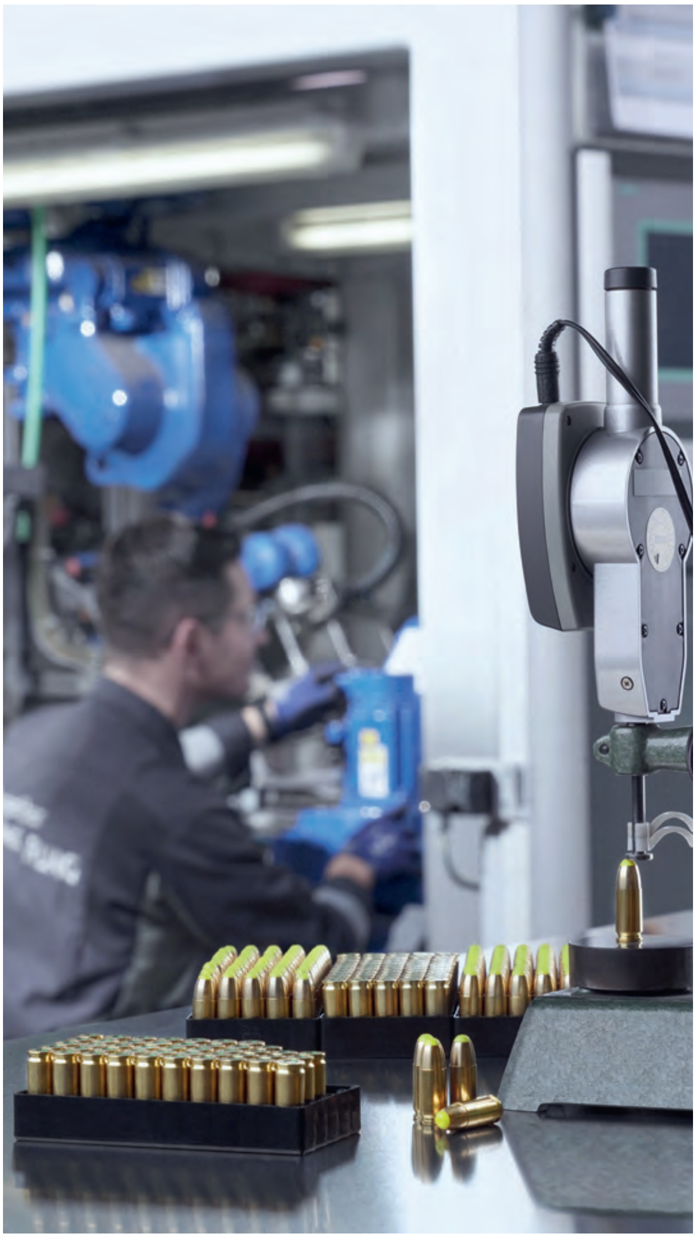

Dutch police rely on ammunition from RUAG Ammotec

RUAG Ammotec has been the ammunition supplier of choice to the Dutch police force (Politie) for more than 40 years. Now, RUAG has won another major contract thanks in part to the patented SINTOX FORENSIS priming composition.

Police forces need their ammunition to operate with precision and reliability even under extreme conditions. As customers, this means that they have a strict, extensive list of requirements to consider when they are placing orders.

The Dutch police are no exception. Their ammunition needs to be able to stop assailants in their tracks or prevent offenders from fleeing a scene – but it also has to rule out the risk of overpenetration wherever possible. In addition to other technical requirements and the need for its ammunition to be free from heavy metals, the police force considers forensic technology relating to ballistics to be of vital importance. RUAG Ammotec's patented SINTOX FORENSIS priming composition provides this by using special non-volatile powder trace elements.

The tender process saw RUAG Ammotec emerge victorious among the suppliers who participated. Over the next five years, it will ensure that the Dutch police are equipped with ammunition that provides the right solution to a range of terminal ballistics requirements in standard police operations.

All success stories at www.ruag.com/successstories

Upgrade for combat training centres

To ensure that the Swiss Armed Forces are able to keep benefiting from state-of-the-art training facilities, RUAG Simulation & Training is modernising the central IT systems in the control stations of its two combat training centres.

Swiss soldiers have the opportunity to train for combat situations under live conditions at two training centres operated by the Swiss Armed Forces: one in Bure and the other at the base in Walenstadt/St. Luzisteig. These locations provide access to laser shooting simulators, which are carried by the soldiers and installed on weapons systems and vehicles. There, they are given access to laser shooting simulators that are designed to be carried and installed on weapons systems and vehicles. The two combat training centres welcome everyone from individual infantry troops and grenadiers through to entire infantry, tank and mechanised infantry companies.

The fully networked control stations are at the very heart of these training centres. They provide a single system platform to which all the simulation facilities and sensors are connected, and which enables data to be exchanged between participants in exercises, vehicles and other objects. Centralised systems of this nature bear the name EXCON, or Exercise Control. They have now been on the scene for around 15 years, which means that some parts of the platform have reached the end of their envisaged lifetime.

Over the next few years, RUAG Simulation & Training will be undertaking a multi-stage process of overhauling hardware and software components in the platforms. From 2025 onwards, all the systems will then have been restored to the state of the art – enabling them to provide full training support for soldiers and officers.

All success stories at www.ruag.com/successstories

Professional partner to the Swiss Air Force

There is scarcely another armed force in the world that puts the F/A-18 Hornet through its paces as much as the Swiss Air Force. Switzerland's airspace is tight, making missions within it an exceptionally difficult task for this aircraft.

Without precautionary structural reinforcements and ongoing preventative remedial measures during use, some of the Swiss Hornet's structural parts that are exposed to particularly high levels of strain would surely have reached the end of their lifetime by now.

To keep the F/A-18 fleet up and running even in tough situations, RUAG MRO Switzerland has successfully forged a close partnership with the Swiss Air Force, the Armed Forces Logistics Organisation and armasuisse (the Federal Office for Defence Procurement). As a result, the company has also become a strategic technology partner to the Swiss Armed Forces in the field of protection of the Swiss airspace – a role to which it dedicates itself fully.

RUAG MRO Switzerland has access to data concerning all signs of fatigue in Switzerland's F/A-18 aircraft. And thanks to international cooperation with other F/A-18 operators, it also receives information about fatigue issues that other fleets are facing. The findings that it gains from its numerous in-depth tests provide yet more valuable input.

RUAG MRO Switzerland's comprehensive stock of expertise and its professional partnership with the Swiss Air Force provide a vital contribution to Switzerland's security, ensuring that the force's fleet continues to run without fail.

All success stories at www.ruag.com/successstories

Financial statements

Overview of key figures

in CHF m	2019	2018
Order intake	1 893	2 221
Order backlog	1 634	1 794
Net sales	2 003	1 998
Operating income	1 988	2 013
Cost of materials and purchased services	(721)	(665)
Personnel expenses	(964)	(942)
Other operating expenses, net	(217)	(219)
Earnings before interest, taxes, depreciation and amortisation (EBITDA)	86	186
EBITDA in % of net sales	4.3 %	9.3 %
Earnings before interest and taxes (EBIT)	(7)	106
EBIT in % of net sales	(0.4 %)	5.3 %
Net profit (loss)	(25)	74
Net profit (loss) in % of net sales	(1.2 %)	3.7 %
Cash flow from operating activities	133	176
Cash flow from investing activities	3	(83)
Free cash flow	135	94
Cash flow from financing activities	(109)	(88)
Equity attributable to the RUAG shareholder	1 028	1 022
Equity in % of total assets	55.1 %	51.2 %
Return on equity [1]	(2.4 %)	7.3 %
Depreciation, amortisation and impairment	93	80
Research and development expenses [2]	173	179
in % of net sales	8.7 %	9.0 %
Net sales per employee (in CHF thousands)	219	218
Added value per employee (in CHF thousands)	126	135
Employees (FTE) as at 31 December incl. apprentices	9 091	9 127
Number of employees (average FTE for year, incl. apprentices)	9 157	9 159
Number of registered shares (par value CHF 1 000)	340 000	340 000
Earnings (loss) per registered share	(72.62)	216.46
Paid dividend per registered share [3]	—	88.24
Distribution ratio	—	40.8 %
Book value per registered share in CHF	3 025	3 007

[1] Net profit (loss) as a percentage of average equity.
[2] Comprises both self-financed and third party-financed research and development expenses (see Note 9 “Research and development expenses”).
[3] The Board of Directors proposes foregoing a dividend payment.

Five-year overview

in CHF m	2019	2018	2017	2016	2015
Order intake	1 893	2 221	1 961	2 036	1 828
Order backlog	1 634	1 794	1 607	1 556	1 378
Net sales	2 003	1 998	1 955	1 858	1 744
Earnings before interest and taxes (EBIT)	(7)	106	119	151	137
EBIT in % of net sales	(0.4 %)	5.3 %	6.1 %	8.1 %	7.8 %
Net profit (loss)	(25)	74	89	116	117
Net profit (loss) in % of net sales	(1.2 %)	3.7 %	4.6 %	6.2 %	6.7 %
Cash flow from operating activities	133	176	88	135	145
Cash flow from investing activities	3	(83)	(146)	(79)	(81)
Free cash flow	135	94	(59)	56	64
Cash flow from financing activities	(109)	(88)	23	(49)	(26)
Equity attributable to the RUAG shareholder	1 028	1 022	1 007	1 005	949
Equity in % of total assets	55.1 %	51.2 %	51.3 %	55.4 %	55.2 %
Return on equity [1]	(2.4 %)	7.3 %	8.9 %	11.9 %	12.7 %
Research and development expenses [2]	173	179	181	171	146
in % of net sales	8.7 %	9.0 %	9.2 %	9.2 %	8.4 %
Employees (FTE) as at 31 December incl. apprentices	9 091	9 127	9 189	8 734	8 163
Number of employees (average FTE for year, incl. apprentices)	9 157	9 159	9 083	8 543	8 115

[1] Net profit (loss) as a percentage of average equity.

[2] Comprises both self-financed and third party-financed research and development expenses (see Note 9 “Research and development expenses”).

Consolidated income statement 1 January to 31 December

in CHF m	Note	2019	2018
Net sales	6	2 003	1 998
Own work capitalised		8	5
Changes in inventories and work in progress		(22)	10
Operating income		1 988	2 013
Cost of materials and purchased services		(721)	(665)
Personnel expenses	7	(964)	(942)
Other operating expenses, net	8	(217)	(219)
Earnings before interest, taxes, depreciation and amortisation (EBITDA)		86	186
Depreciation and impairment of property, plant and equipment/investment property	17, 18	(75)	(68)
Amortisation and impairment of intangible assets	19	(17)	(12)
Earnings before interest and taxes (EBIT)		(7)	106
Financial income	10	2	3
Financial expenses	10	(10)	(9)
Share in income of associates	20	(0)	4
Earnings (loss) before taxes		(16)	104
Income taxes	11	(9)	(31)
Net profit (loss)		(25)	74
Net profit (loss) attributable to:			
Shareholders of RUAG Holding Ltd		(25)	73
Non-controlling interests		0	0
Net profit (loss)		(25)	74

The notes to the consolidated financial statements on pages 50 to 88 form an integral part of the consolidated financial statements.

Consolidated balance sheet as at 31 December

in CHF m	Note	2019	2018
Cash and cash equivalents	12	237	209
Current financial assets	13	5	5
Trade receivables	14	254	278
Prepayments to suppliers	14	26	11
Other current receivables	14	21	29
Tax assets		8	15
Prepaid expenses and accrued income		18	28
Inventories and work in progress	15, 16	625	710
Current assets		1 194	1 285
Property, plant and equipment	17	520	512
Investment property	18	79	80
Intangible assets	19	10	56
Associates	20	38	41
Non-current financial assets	13	2	2
Deferred tax assets	11	22	20
Non-current assets		671	712
Total assets		1 865	1 996
Current financial liabilities	21	4	38
Trade accounts payable	22	121	109
Prepayments from customers	22	213	251
Other current liabilities	23	40	42
Tax liabilities		18	28
Deferred income and accrued expenses	25	210	221
Current provisions	26	79	85
Current liabilities		684	774
Non-current financial liabilities	21	1	48
Other non-current financial liabilities	24	1	1
Employee benefit obligations	27	83	70
Non-current provisions	26	29	31
Deferred tax liabilities	11	37	48
Non-current liabilities		151	198
Share capital	28	340	340
Capital reserves		10	10
Retained earnings		816	870
Offsetting of goodwill		(85)	(156)
Other reserves		(7)	(9)
Foreign currency translation adjustments		(45)	(33)
Equity attributable to the RUAG shareholder		1 028	1 022
Equity attributable to non-controlling interests		2	2
Total equity		1 030	1 024
Total liabilities and equity		1 865	1 996

The notes to the consolidated financial statements on pages 50 to 88 form an integral part of the consolidated financial statements.

Consolidated statement of cash flows, 1 January to 31 December

in CHF m	Note	2019	2018
Net profit (loss)		(25)	74
Depreciation, amortisation and impairment	17, 18, 19	93	80
Change in non-current provisions and deferred taxes		12	2
Use of non-current provisions		(5)	(5)
Share in income of associates	20	0	(4)
Other non-cash changes		(5)	4
Change in net working capital[1]		77	28
(Gain)/loss on disposal of non-current assets incl. investments		(23)	(9)
Financial income	10	(2)	(3)
Financial expenses	10	10	9
Cash flow from operating activities[2]		133	176
Capital expenditures for plant and equipment	17	(66)	(67)
Capital expenditures for property incl. investment properties	17, 18	(28)	(26)
Capital expenditures for intangible assets	19	(4)	(2)
Acquisition of subsidiaries less cash and cash equivalents acquired	4	(2)	(2)
Increase in financial assets		—	(2)
Disposal of plant and equipment		2	1
Disposal of property incl. investment properties		2	13
Disposal of intangible assets		0	0
Disposal of investments less cash and cash equivalents disposed of	4	98	0
Decrease in financial assets		0	0
Dividends received from associates	20	1	2
Cash flow from investing activities		3	(83)
Free cash flow		135	94
Decrease in third-party financial assets		3	0
Decrease in current financial liabilities		(30)	(45)
Decrease in non-current financial liabilities		(45)	—
Finance lease payments		(0)	(0)
Financial income received		2	3
Financial expenses paid		(9)	(3)
Dividends paid to shareholders		(30)	(40)
Dividends paid to non-controlling interests		(0)	(2)
Cash flow from financing activities		(109)	(88)
Change in cash and cash equivalents before foreign currency translation adjustments		26	6
Cash and cash equivalents at beginning of period		209	201
Foreign currency translation adjustments in respect of cash and cash equivalents		2	1
Cash and cash equivalents at end of period		237	209

[1] Excludes current financial assets, current financial liabilities and other non-current liabilities.
[2] Including income taxes of CHF 10 million paid in the year under review (previous year: CHF 13 million).

The notes to the consolidated financial statements on pages 50 to 88 form an integral part of the consolidated financial statements.

Consolidated statement of changes in equity

in CHF m	Share capital	Capital reserves	Retained earnings	Offsetting of goodwill	Other reserves	Foreign currency translation adjustments	Attributable to the RUAG shareholder	Attributable to non-controlling interests	Total equity
Balance as at 1 January 2018	340	10	837	(156)	(9)	(14)	1 007	4	1 011
Net profit	—	—	73	—	—	—	73	0	74
Goodwill offset against equity	—	—	—	—	—	—	—	—	—
Change in fair value of cash flow hedges	—	—	—	—	(4)	—	(4)	—	(4)
Gains and losses from cash flow hedges transferred to profit or loss	—	—	—	—	4	—	4	—	4
Foreign currency translation adjustments of foreign subsidiaries	—	—	—	—	—	(18)	(18)	(0)	(18)
Dividends paid	—	—	(40)	—	—	—	(40)	(2)	(42)
Balance as at 31 December 2018	340	10	870	(156)	(9)	(33)	1 022	2	1 024
Balance as at 1 January 2019	340	10	870	(156)	(9)	(33)	1 022	2	1 024
Net profit (loss)	—	—	(25)	—	—	—	(25)	0	(25)
Goodwill offset against equity	—	—	—	(0)	—	—	(0)	—	(0)
Recognised in profit or loss due to disposal [1]	—	—	—	72	—	(1)	71	—	71
Change in fair value of cash flow hedges and losses	—	—	—	—	(9)	—	(9)	—	(9)
Gains and losses from cash flow hedges transferred to profit or loss	—	—	—	—	11	—	11	—	11
Foreign currency translation adjustments of foreign subsidiaries	—	—	—	—	—	(12)	(12)	(0)	(12)
Dividends paid	—	—	(30)	—	—	—	(30)	(0)	(30)
Balance as at 31 December 2019	340	10	816	(85)	(7)	(45)	1 028	2	1 030

[1] The goodwill and cumulative foreign currency translation adjustments were derecognised from equity and are a component of the gain on disposals.

The amount of non-distributable statutory reserves was CHF 53 million as at 31 December 2019 (previous year: CHF 51 million).

In the year under review, a dividend of CHF 30 million (previous year: CHF 40 million) was paid to the shareholder of RUAG Holding Ltd from the previous year's result. This is equivalent to a dividend per share of CHF 88.25 (previous year: CHF 117.65).

The notes to the consolidated financial statements on pages 50 to 88 form an integral part of the consolidated financial statements.

This financial report is a translation of the original German version. In case of any inconsistency the German version shall prevail.

1 General information: Business activities and relationship with the Swiss Confederation

RUAG Holding Ltd is a Swiss joint-stock company headquartered in Bern which has been wholly owned by BGRB Holding Ltd since 4 November 2019. Prior to this date, RUAG Holding Ltd was wholly owned by the Swiss Confederation. BGRB Holding Ltd was founded in connection with the unbundling of RUAG and is wholly owned by the Swiss Confederation. RUAG Holding Ltd and its subsidiary companies (hereinafter referred to as "RUAG") focus on their core aerospace and defence businesses with goods and services in the military and civilian sectors and on the development of international growth markets. RUAG is bound by the owner's strategy of the Swiss Federal Council and its fundamental mission is to equip and maintain the technical systems of the Swiss Armed Forces.

Relationship with the Swiss Confederation

Through BGRB Holding Ltd, the Swiss Confederation is the sole shareholder of RUAG Holding Ltd. Under the terms of the Federal Act on State-Owned Defence Companies, any disposal of the capital or voting majority of the Swiss Confederation to third parties requires the approval of the Federal Assembly. As sole shareholder, the Confederation exercises control over all decisions taken at the General Meeting, including the election and remuneration of members of the Board of Directors and dividend resolutions. Details of transactions with the Swiss Confederation are given in Note 33.

2 Summary of significant accounting policies

2.1 Basis of preparation

RUAG's consolidated financial statements have been prepared in accordance with the guidelines of the Swiss Accounting and Reporting Recommendations (Swiss GAAP FER). Certain provisions of Swiss GAAP FER 31 "Additional recommendations for listed companies" have also been applied. These provisions contain recommendations regarding income tax, financial liabilities and segment reporting. Furthermore, the provisions of Swiss company law have been fulfilled. The reporting period covers twelve months. The consolidated financial statements are presented in Swiss francs (CHF). The balance sheet is structured according to maturities.

Current assets include assets that

- are realised within 12 months after the balance sheet date, or are sold, consumed or realised as part of operational activities, or that
- are held for trading purposes, as well as
- cash and cash equivalents.

All other assets are non-current assets.

Current liabilities include liabilities

- that must be settled within 12 months after the balance sheet date or
- for which a cash outflow is probable within the scope of operational activities, or
- if they are held for trading purposes.

All other liabilities are non-current liabilities.

The income statement is prepared using the total cost method.

Items are measured at historical cost, unless a recommendation requires a different valuation basis for a line item.

Preparation of the consolidated financial statements in accordance with the Swiss GAAP FER recommendations to some extent requires the use of estimates and assumptions. These have an impact on the recognised assets and liabilities, the application of accounting policies, the disclosure of contingent assets and liabilities at the end of the reporting period and the reporting of income and expenses during the reporting period. Even though these estimates and assumptions are based on the most recent knowledge of the management regarding current developments and events, the actual results may differ. Exceptionally complex areas, or areas where more extensive use of estimates and assumptions is necessary or where assumptions and estimates have a material impact on the consolidated financial statements, are presented in Note 3.

Unless otherwise indicated, all amounts are in millions of Swiss francs. Please note that the use of rounded figures and percentages may result in differences due to commercial rounding.

2.2 Explanation of key figures not defined in Swiss GAAP FER

The operating income sub-total shown separately on the income statement contains all operating income, own work capitalised less changes in inventories and work in progress.

EBITDA corresponds to the earnings before interest and taxes (EBIT) before depreciation and impairment of property, plant and equipment and amortisation and impairment of intangible assets and is reported separately in the income statement.

The free cash flow comprises the cash flow from operating activities and the cash flow from investing activities and is shown separately in the statement of cash flows.

These three figures are key performance indicators for RUAG and are therefore shown separately.

2.3 Principles and scope of consolidation

RUAG's annual consolidated financial statements include subsidiaries where RUAG Holding Ltd is effectively able to control the financial and operating policies. For control to exist, the investor must have power, exposure or rights to variable returns and the ability to combine those requirements, that is the ability to use its power to affect the variable returns. This is usually the case if RUAG directly or indirectly holds the majority of the voting power or the potential voting rights of the entity. The assets, liabilities, equity, income and expenses of fully consolidated subsidiary companies are included in their entirety in the consolidated financial statements. Non-controlling interests in equity and net profit are stated separately. Subsidiaries and associates are consolidated with effect from the date of their acquisition, and eliminated from the consolidated financial statements in the event of a loss of control. Changes to investments in subsidiary companies are recognised as equity transactions insofar as these subsidiary companies were previously controlled and continue to be controlled. All intra-Group receivables, liabilities, expenses and income, as well as unrealised intercompany profits, are fully eliminated on consolidation.

The consolidated financial statements are based on the individual financial statements of the Group companies prepared in accordance with uniform principles. All subsidiaries included in the consolidated financial statements have 31 December as their reporting date.

Associates where RUAG exerts a significant influence (normally 20–50 % of the voting rights are held directly or indirectly), but which the Group does not control, are recognised using the equity method. An equity investment is initially recorded at fair value. When measured subsequently, the carrying amount of the investment is adjusted to take account of the share of profit or loss less the share of the profit distribution. These investments are reported under "Associates".

Investments where RUAG does not exercise significant influence (less than 20 % of the voting rights are held directly or indirectly) are stated at historical cost less any valuation allowances and shown under "Non-current financial assets".

An overview of all significant subsidiaries, associates and non-controlling interests is provided in Note 37.

The key consolidation and accounting principles were applied unchanged from the previous year.

2.4 Foreign currency translation

RUAG Holding Ltd's consolidated financial statements are presented in Swiss francs (CHF), the functional currency of RUAG Holding Ltd.

Transactions in foreign currencies are translated into the functional currency of the Group companies at the exchange rate at the transaction date. At the end of the reporting period, foreign-currency receivables and liabilities (monetary items) are translated at the exchange rate at the end of the reporting period, while non-monetary items measured at fair value or cost in a foreign currency are translated into the functional currency at the rate at the date of the fair value measurement or the rate at the transaction date. The resulting exchange differences are recognised in profit or loss, with the exception of exchange differences arising from effective cash flow hedges or net investments in foreign subsidiaries, which are recognised directly in equity.

The assets and liabilities of subsidiaries and associates recognised using the equity method whose functional currency is not the Swiss franc are translated into Swiss francs on consolidation at the exchange rate applicable at the end of the reporting period. The income statement, cash flow statements and other fluctuating items are translated at the average exchange rate for the reporting period. Exchange differences arising from the conversion of the annual statements of subsidiaries or affiliates are recognised directly in consolidated equity and reported separately as cumulative foreign currency translation adjustments. In the event of the disposal (to the extent that this leads to the loss of control or significant influence) of a foreign subsidiary or associate, the cumulative foreign currency translation adjustments previously recognised in equity are transferred to the income statement as a component of the gain or loss on disposals.

Differences arising in the reporting period on translation of equity and non-current intra-Group financial transactions related to net investments in foreign operations, in addition to retained earnings and other equity items, are recognised immediately in the cumulative foreign currency translation adjustments in equity.

In these consolidated financial statements, the significant currencies were translated at the following rates in the reporting periods:

Exchange rates

Currency		Unit	Annual average 2019	End-of-year rate 2019	Annual average 2018	End-of-year rate 2018	Annual average 2017	End-of-year rate 2017
Euro	EUR	1	1.11	1.09	1.15	1.13	1.11	1.17
Swedish krona	SEK	100	10.52	10.39	11.26	10.99	11.53	11.89
US dollar	USD	1	0.99	0.97	0.98	0.98	0.98	0.98
Pound sterling	GBP	1	1.27	1.27	1.31	1.26	1.27	1.32
Hungarian forint	HUF	100	0.34	0.33	0.36	0.35	0.36	0.38

2.5 Cash and cash equivalents

Cash and cash equivalents comprise cash and the balances in postal checking and demand deposit accounts with financial institutions. They also include term deposits held with financial institutions and short-term money market investments that have a remaining term of no more than three months as at the balance sheet date. This definition is also used for the statement of cash flows. Cash and cash equivalents are recognised at amortised cost.

2.6 Current financial assets

Current financial assets comprise term deposits held with financial institutions and short-term money market investments that are held for trading or due within one year.

2.7 Receivables and prepayments
Trade receivables and prepayments are recognised at amortised cost less valuation allowances for doubtful receivables. The valuation allowances are estimated on the basis of an analysis of the actual exposure to losses from receivables outstanding at the end of the reporting period. The valuation allowances comprise specific valuation allowances for specifically identified items where there is objective evidence that the outstanding amount will not be received in full, and global valuation allowances. The global valuation allowances are based on historical experience. Receivables and prepayments judged to be non-recoverable are charged to profit or loss as “Other operating expenses”.

2.8 Inventories and work in progress
Inventories and work in progress are measured at the lower of cost and net realisable value. Cost comprises all costs of purchase and conversion, including pro rata production overheads. All foreseeable exposures to loss from work in progress are accounted for by recognising economically reasonable valuation allowances. Inventories are valued using the weighted average method or standard cost accounting. The standard costs that are determined are regularly monitored and, if any major discrepancies are observed, adjusted to the latest conditions. Impairment losses are reported for hard-to-sell or slow-moving inventories. Non-saleable inventories are written off in full.

Long-term construction and service contracts are measured according to the percentage of completion method. When the conditions are satisfied, work in progress and sales are recognised by reference to the stage of completion. Long-term construction contracts are defined as manufacturing or service orders where completion of the order extends over a longer period, calculated from the time the order is awarded to the time it is essentially completed.

The stage of completion is derived from the relationship between the costs incurred by the order and the overall estimated cost of the order (cost-to-cost method). Losses from long-term construction and service contracts are recognised immediately and in full in the financial year in which the losses are identified, irrespective of the stage of completion. Order costs and pro rata profits from long-term construction and service contracts which are measured using the percentage of completion method are shown as work in progress (percentage of completion) as a component of inventories and work in progress. They are stated at cost plus a pro rata profit that corresponds to the stage of completion achieved.

In the Space segment, the milestone method is applied to a large extent. Here, project milestones are defined on the basis of individual customer contracts; upon reaching these milestones, services performed are invoiced to the customer and sales and income are realised on a pro rata basis.

If the outcome of long-term construction and service contracts cannot be estimated reliably, sales are only recognised to the extent of contract costs incurred that are likely to be recoverable (recoverable cost method). Contract costs are recognised when incurred unless they give rise to an asset that is linked to the future activity on the contract. Any expected loss on a contract is expensed immediately.

Semi-finished products and services in progress are stated under “Inventories and work in progress”.

Sales from services provided are recognised in the income statement on the basis of the stage of completion at the end of the reporting period.

2.9 Property, plant and equipment
Property, plant and equipment are recognised at cost less accumulated depreciation and impairment. Repair and maintenance costs are stated as an expense. Major renovations and other value enhancing costs are capitalised and depreciated over their estimated useful life. The carrying amount of the replaced parts is derecognised. Items are depreciated on a straight-line basis, with the exception of land, which is not depreciated and is recognised at cost.

The estimated useful lives for the main classes of property, plant and equipment are:

Class	Useful life in years
Plant and equipment	5 to 12
Fixtures and fittings	10
Information technology	3 to 5
Motor vehicles	5 to 10
Aircraft	10 to 15
Buildings (operating properties)	20 to 60

The useful lives are reviewed at least once a year at the end of the reporting period and adjusted where necessary.

2.10 Government grants
Government grants related to assets are recognised in the balance sheet at fair value as deferred income. Government grants are then recognised in profit or loss as other income on a straight-line basis over the useful life of the assets.

2.11 Leases
Leased assets where the benefits and risk arising from ownership are essentially transferred to RUAG are recognised at the lower of the fair value/market value of the leased asset and the cash value of the future lease payments. Correspondingly, the estimated net present value of future, non-cancellable lease payments is carried under liabilities from finance leases. Assets under finance leases are amortised on a straight-line basis over the shorter of their estimated useful life or the duration of the lease. All other lease transactions are classified as operating leases.

2.12 Investment property
Investment properties are measured at cost minus accumulated depreciation and impairment calculated on a straight-line basis. Repair and maintenance costs are stated as an expense. Major renovations and other value enhancing costs are capitalised and depreciated over their estimated useful life. Investment properties are depreciated on a straight-line basis over a useful life of 40 to 60 years with the exception of land, which is not depreciated and is recognised at cost.

Majority leased sites to third parties are classified as investment properties. The fair value of the properties is calculated solely for disclosure reasons and was measured using the discounted cash flow (DCF) method. No expert market appraisal was carried out in the reporting period.

2.13 Intangible assets and goodwill
Intangible assets have a finite useful life and are recognised at cost less accumulated amortisation and impairment. Intangible assets acquired separately in business combinations are recognised at their acquisition-date fair value less any necessary impairment.

Items are amortised on a straight-line basis over the following estimated useful lives:

Class	Useful life in years
Patents and developments	5 to 15
Trademarks and prototypes	3 to 8
ERP systems	3 to 5
Licences and rights	1 to 10
Order backlog and customer relationships	1 to 10

The useful lives are reviewed at least once a year at the end of the reporting period and adjusted where necessary.

Business combinations are accounted for using the acquisition method. The cost is recognised at the fair value of the consideration at the transaction date. Identifiable assets acquired and liabilities and contingent liabilities assumed are recognised in the balance sheet at their acquisition-date fair value, irrespective of the extent of any non-controlling interest. Transaction costs are recognised as expenses in profit or loss. The acquisition costs exceeding the net assets recognised at fair value (goodwill) are offset against equity at the time of acquisition. If the purchase price contains elements that depend on future events, these are estimated and recognised as accurately as possible at the time of acquisition. If, when the purchase price is definitively calculated at a later date, there are any differences, the effect is recognised in the income statement under "Other operating expenses, net". The impact of the goodwill being theoretically capitalised (acquisition cost, residual value, useful life, amortisation) and any potential impairment are shown in the notes. Any negative difference is recognised directly in profit or loss after being reviewed. In the event of a company being sold, the goodwill previously recorded under equity will be booked out and then recognised in the income statement as a component of the gain or loss on disposals.

2.14 Research and development expenses
Research expenses are not capitalised and are expensed as incurred. RUAG examines the capitalisation of development costs on a case-by-case basis. Development costs are only recognised as intangible assets if an intangible asset is identifiable, the entity believes it can demonstrate the technical feasibility and ability to complete and use the asset, the asset is expected to generate future economic benefits and the cost of the asset can be reliably determined. Capitalised development costs are measured at cost less accumulated amortisation and accumulated impairment losses.

2.15 Impairment

Impairment of assets, in particular property, plant and equipment and intangible assets The recoverable amount of property, plant and equipment, intangible assets and the goodwill recognised and disclosed in the notes is reviewed whenever changes in circumstances or events indicate that the carrying amount may be overestimated. Where there is an indication of a possible overestimate, the Group measures the fair value on the basis of expected future cash flows from use and eventual sale, minus any cost of disposal. Where the carrying amount exceeds the higher of fair value less costs to sell and value in use, an impairment loss equivalent to the difference is recorded (this does not apply to goodwill). As goodwill is offset against equity at the time of acquisition, any impairment of the goodwill is not charged to the income statement, but is only disclosed in the notes. The impairment assessment is based on the smallest group of assets for which independent cash generating units are identifiable. The estimation of future discounted cash flows is based on the forecasts and assumptions of the management. Accordingly, the actual cash flows generated may differ from these estimates.

2.16 Financial liabilities
Financial liabilities are initially recognised at fair value less direct transaction costs and subsequently measured at amortised cost using the effective interest method.

2.17 Trade accounts payable and prepayments
Trade accounts payable are recognised at amortised cost. Prepayments are measured at amortised cost using the effective interest method.

2.18 Deferred income and accrued expenses
Deferred income and accrued expenses contain expenses incurred during the reporting period for which supplier invoices are yet to be received, as well as income and bonuses received in advance that relate to future periods.

2.19 Provisions
Provisions are recognised where:
- RUAG has a present legal or constructive obligation due to a past event;
- it is likely that an outflow of resources embodying economic benefits will be required to settle the liability; and
- a reliable estimate can be made of the amount of the liability.

Provisions are discounted if the effect of discounting is material.

Provisions for restructuring Costs arising in connection with restructurings are treated as an expense when management has decided on a programme from which a constructive liability has arisen and the amount of this liability can be estimated reliably. The costs of redundancy plans are treated as an expense at the time of the management's decision, provided that a probable liability has arisen and the amount of this liability can be estimated reliably.

Provisions for contract losses Losses arising from long-term construction and service contracts are recorded immediately and in full in the financial year in which the losses are identified.

Provisions for warranties Provisions for warranties are recognised based on the sales revenue to which warranty obligations relate and the goods and services provided in the past.

Provisions for leave and overtime credits Employees' entitlements to leave and overtime credits are calculated at the end of the reporting period and accounted for on an accrual basis.

2.20 Employee benefit obligations
In accordance with the corresponding national provisions, RUAG offers pension plans for its employees. These are primarily institutions and foundations that are financially independent from the Group. They are usually financed via employee and employer contributions.

The economic impacts of the pension plans are assessed on an annual basis. Any excesses/shortfalls are determined on the basis of the annual financial statements of the corresponding pension funds; such calculations are based on Swiss GAAP FER 26 (Swiss plans) and the applicable country-specific methods (foreign plans).

An economic benefit is only capitalised if this is permitted and where the intention is
- to use the excess to reduce employer contributions;
- to refund it to the employer in line with local legislation; or
- to use it in another way that would economically benefit the employer outside of the benefits in line with the regulations.

An economic liability is recognised if the conditions for creating a provision are met under Swiss GAAP FER 23. This is recognised under employee benefit obligations.

Changes to an economic benefit or liability are recognised in the income statement in the same way as for the contributions made for the period. Any impact on income of foreign pension plans is recorded in the operating result under personnel expenses.

2.21 Other long-term employee benefits
Other long-term employee benefits include long-service awards. These are calculated using the projected unit credit method and are reported in the item "Provisions for loyalty bonuses and anniversary benefits".

2.22 Current and deferred income taxes
Income taxes include all current and deferred taxes which are based on income. They are recognised in profit or loss except to the extent that they relate to a business combination or to an item recognised directly in equity. Taxes which are not based on income, such as taxes on real estate and capital, are recognised under "Other operating expenses".

Current income taxes comprise the taxes expected to be payable in respect of taxable income, calculated at the tax rates that are applicable or are announced as at the balance sheet date, and any adjustments to the tax liability in respect of prior periods.

Deferred taxes are recognised for temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and their tax base. Deferred taxes are not recognised for:
- temporary differences when recognizing assets and liabilities for the first time in relation to transactions that do not impact net profit or taxable income; and
- temporary differences in relation to stakes in subsidiaries and associates, provided the Group is able to control the period of time over which these differences will be reversed and it is likely that they will not be reversed in the foreseeable future.

Deferred taxes are measured taking into account when and how the assets concerned are expected to be realised or settled. In this regard, tax rates apply that are applicable or are announced as at the balance-sheet-date. Deferred taxes are included in non-current assets (deferred tax assets) or non-current liabilities (deferred tax liabilities) and are offset if certain conditions are met. Deferred tax assets for unused tax losses and deductible temporary differences are recognised to the extent that there are likely to be future profits against which they can be used. The tax rates are based on the actual tax rates and the tax rates expected to apply at the legal entities in question.

2.23 Equity

Share capital The share capital is the nominal capital comprising all registered shares that have been issued.

Capital reserves This item consists of the capital paid in over and above the par value (less transaction costs).

Retained earnings Retained earnings primarily include the subsidiaries' accumulated earnings that were not distributed to shareholders. The appropriation of available earnings is subject to local legal restrictions.

Offsetting of goodwill This item consists of the goodwill from acquisitions that is offset directly against equity at the time of acquisition.

Other reserves Other reserves primarily comprise the effective portion of the cumulative net changes in the fair value of hedging instruments used to hedge cash flows.

Foreign currency translation adjustments This item consists of the difference that arises when assets, liabilities, income and expenses of subsidiaries whose functional currency is not the Swiss franc are translated into Swiss francs.

2.24 Net sales

Net sales include the fair value of the consideration received from the sale of goods and the rendering of services by RUAG in its ordinary business operations. The amount is shown after any deductions for value added tax, price reductions, rebates and discounts and intra-Group sales. RUAG records its sales when the amounts can be measured reliably, future cash flows are likely and the specific criteria described below have been fulfilled.

Long-term contracts Net sales for the period comprise "invoiced sales" plus "change in contracts under the percentage of completion method". "Invoiced sales" comprise accrued or invoiced amounts for goods and services already provided in the period, while "change in contracts under the percentage of completion method" includes the goods and services already provided under current construction and service contracts and measured using the percentage of completion method.

Sale of goods Sales from the sale of goods are stated at the time of delivery or performance, i.e. when the relevant significant risks and rewards of ownership are transferred to the buyer.

Rendering of services Sales from the rendering of services are determined on the basis of either time and material or a fixed price contract.

Sales from fixed price agreements are measured using the percentage of completion method when both the full costs incurred up to completion of the order and the stage of completion at the end of the reporting period can be reliably determined. The stage of completion is derived from the relationship between contract costs incurred and the total estimated cost of the order (cost-to-cost method) or using the milestone method (Space segment). If the proceeds of a construction contract cannot be reliably measured, sales are recognised only to the extent of the potentially recoverable costs incurred by the contract recognised as an expense in the relevant period. Contributions from third parties arising from contract development work are recognised as sales and assigned to the period in which the corresponding development costs are incurred.

Other income Other income, such as rental income and interest income, is stated on a time-proportionate basis. Dividend income is recognised once legal entitlement to payment has arisen.

Advance payments received Advance payments received are deferred and then recognised as sales when the corresponding services are provided.

2.25 Segment information

Reportable operating segments are determined on the basis of the management approach. External segment reporting is then carried out in accordance with RUAG's organisational and management structure as well as internal financial reporting to RUAG's Chief Operating Decision Maker, the CEO. As part of the changes in the organisational and management structure from 1 January 2019 following the unbundling of RUAG, reporting is now broken down according to the "Space", "Aerostructures", "MRO International", "Ammotec" and "MRO Switzerland" segments. To allow the segments to be compared, the previous year's figures have been adjusted accordingly in the segment reporting. In addition, the reporting includes the area "Other segments", which comprises central services such as real estate management and IT, RUAG's corporate units and the former Cyber Security business unit (until the Clearswift Group was sold on 2 December 2019). Unrealised gains or losses may be incurred as a result of services or disposal of assets between the individual segments. Those are eliminated and stated in the segment information in the "Elimination" column. The assets of the segments contain all the assets required for operations that can be assigned to a specific operating segment. The assets of the segments primarily comprise receivables, inventories, property, plant and equipment and intangible assets. The investments of the segments contain additions to property, plant and equipment and other intangible assets.

Space segment With a broad international customer base, RUAG Space is the leading supplier of products for the space industry in Europe and has a growing presence in the United States as well. With 12 production sites in six countries, the division specialises in high-performance components for use aboard satellites and other spacecraft such as launch vehicles. The division's expertise is divided into three product groups: electronics for all space applications (Electronics product group), mechanical and thermal products for satellites and structures (Spacecraft product group), and payload fairings and separation systems for launch vehicles (Launchers product group). These product groups represent the most important sources of earnings.

Aerostructures segment RUAG Aerostructures is a globally active tier 1 supplier manufacturing aircraft for civilian and military customers. Key activities include the development, production and final assembly of complete fuselage sections, wing and control surface components as well as sophisticated component assemblies and parts for civil and military aircraft. The segment also provides services in the field of surface treatment. One of the division's strengths is the management of complex supply chain networks. Among other things, it is responsible for the complete global fuselage section supply chains for Airbus and Bombardier. The main sources of earnings are the sale of aerostructures and of complex assemblies and components.

MRO International segment RUAG MRO International is an independent supplier, support provider and integrator of systems and components for civil and military aviation across the globe. As the manufacturer (OEM) of the Dornier 228, a versatile aircraft designed for special missions as well as passenger and cargo transport, RUAG's focus is on providing customer and OEM support in this particular area. RUAG MRO International also develops simulation and training facilities for live, virtual and constructive (LVC) training delivered to international security and armed forces. The main sources of earnings are maintenance and life extension services as well as the sale of systems and subsystems.

Ammotec segment With its Armed Forces & Law Enforcement, Hunting & Sports and Industry business units, RUAG Ammotec is the European market leader in small-calibre ammunition, pyrotechnic elements and components. Its precision ammunition for special forces is in high demand worldwide. The division is also the leader in heavy-metal-free primer technologies as used in actuator cartridges in the construction industry and automotive safety system applications. The product range also includes large-calibre training systems, hand grenades and environmentally safe disposal of pyrotechnic products. The main sources of earnings are the sale of ammunition as well as the components business for industrial purposes.

MRO Switzerland segment RUAG MRO Switzerland provides a vital contribution to Switzerland's security. As a future-oriented technology partner, the company focuses on life-cycle management, operation and ensuring the availability of military systems – in particular for the Swiss Armed Forces. In addition to comprehensive system management tasks, the extensive product and service portfolio includes unique subsystems and components for tracked and wheeled vehicles, combat jets, military helicopters and air defence. Moreover, it provides reliable information and communication solutions as well as comprehensive maintenance and repair services. The main sources of earnings are the sale of corresponding products as well as servicing and maintenance services.

2.26 Related party transactions

RUAG provides maintenance services and produces defence equipment for the Swiss Federal Department of Defence, Civil Protection and Sport (DDPS), and procures services from the same. The DDPS is RUAG's largest customer. The procurement contracts awarded by the DDPS for defence products and services are subject to civil law. The process of awarding such contracts is subject to the Swiss Confederation's provisions regarding public procurement. These provisions apply to all suppliers of goods and services, and are based on the principle of free competition.

2.27 Derivative financial and hedging instruments

Derivative financial instruments are measured at fair value. The way in which the gain or loss is measured depends on whether the instrument is used for the purpose of hedging a specific risk and whether the conditions for hedge accounting are met. The objective of hedge accounting is to ensure the change in value of the hedged item and hedge instrument is included in the income statement at the same time.

When concluding a hedge transaction, the Group documents the relationship between hedging instruments and hedged items, as well as the purpose and strategy of the hedge. The process also involves linking all hedging derivatives with specific assets and liabilities, or firm commitments and forecasted transactions. At inception as well as during the life of the hedge, the Group documents the extent to which the derivatives used for the hedge offset the change in fair value of the hedged item. When a contract is concluded, a derivative instrument is defined as

- a hedge on the change in the fair value of a recorded asset or a liability (fair value hedge), or as
- a hedge on cash flows from a forecasted transaction or firm commitment (cash flow hedge), or as
- a hedge on a net investment in a foreign operation.

Changes in the fair value of foreign exchange hedging instruments that are used to hedge the cash flows from a forecasted transaction or firm commitment and that offer an effective hedge are recognised as cash flow hedges. These instruments are measured at fair value; the effective portion of the change in fair value of the foreign exchange hedging instrument is recognised in equity and separately disclosed under "Other reserves". The ineffective portion is recognised in profit or loss in the income statement under "Other operating expenses". Upon occurrence of the underlying transaction, the relevant hedging instrument is reclassified from equity to the income statement. Commodity price hedging instruments are recognised at their positive or negative replacement value as at the balance sheet date and are disclosed in the notes.

Currently, RUAG has only hedges on cash flows from forecasted transactions or firm commitments (cash flow hedge).

3 Significant judgements and sources of estimation uncertainty in the application of the accounting policies

The preparation of the consolidated financial statements depends on assumptions and estimates associated with the accounting policies where there is a certain amount of scope for the use of management judgement. The application of accounting policies in the consolidated financial statements requires certain forward-looking estimates and assumptions to be made that may have a significant effect on the reported amounts of assets, liabilities, income and expenses and the related disclosures. The estimates and assumptions used in recognition and measurement are based on historical experience and other factors that are believed to be reasonable under the circumstances. The following items involve significant estimates and assumptions:

Inventories and work in progress The current value of inventories and work in progress is reassessed periodically. This involves classifying the individual items in terms of inventory sales ratios and valuing them accordingly. The carrying amount of inventories and work in progress as well as valuation allowances are explained in Note 15 "Inventories and work in progress".

Long-term construction and service contracts and manufacturing agreements Estimates with a significant effect are used as the basis for the measurement of long-term construction and service contracts using the percentage of completion method. Although the estimates, such as the projects' stage of completion and estimated contract costs, are made to the best of management's knowledge about current events and possible future measures, actual outcomes may ultimately differ from these estimates. Please also refer to the explanations in Note 16 "Percentage of completion" and Note 26 "Provisions".

Property, plant and equipment and intangible assets Property, plant and equipment and intangible assets are reviewed annually for indications of impairment. If there are indications that these assets are overvalued, an estimate is made of the future cash flows expected to result from the utilisation of these assets or their possible disposal. Actual cash flows may differ from the discounted future cash flows based on these estimates. Factors such as changes in the planned use of property, plant and equipment, site closures, technical obsolescence or lower-than-forecasted sales of products, the rights to which have been recognised, may shorten the estimated useful life or result in impairment. The carrying values of property, plant and equipment and intangible assets are disclosed in Note 17 "Property, plant and equipment", Note 18 "Investment properties" and Note 19 "Intangible assets".

Provisions As part of their ordinary business operations, Group companies are exposed to various risks. These are continuously assessed and provisions are set aside accordingly in light of the available information on the basis of the cash flows that can realistically be expected. For example, provisions for warranties are determined on the basis of empirical values and provisions for litigation by means of a legal assessment. The carrying values of such provisions are disclosed in Note 26 "Provisions".

Deferred income taxes Deferred tax assets are recognised based on management's judgement. Deferred tax assets are only recognised for tax loss carryforwards if it is probable that they can be used. Their use depends on the ability to generate future taxable profits that can be offset against existing loss carryforwards. An assessment as to the probability of their future use requires estimates of various factors such as future earnings. If actual amounts differ from the estimates, this may result in a change in the assessment of the deferred tax assets' recoverability. The carrying values of current and deferred tax assets and liabilities are disclosed in the consolidated balance sheet and Note 11 "Income taxes".

4 Acquisitions, formations and sales of companies

Acquisitions, mergers and formations of subsidiaries

Acquisitions No acquisitions were made in the year under review.

As of 1 January 2018, RUAG Ammotec AG acquired 40.4 %, and as of 2 May 2018, the remaining 10.1 % of the outstanding shares of Visier Medien Holding AG, domiciled in Zug (Switzerland). The company, which held 100 % of the shares of VS Medien GmbH, domiciled in Bad Ems (Germany), was acquired retroactively as of 1 January 2019 by RUAG Ammotec AG in Thun (Switzerland). The publishing house produces the industry magazines Visier, Caliber and Schweizer Waffenmagazin. This full acquisition opens up domestic and international channels in the print and online business for direct communication with the relevant target groups (hunters and marksmen for munition and merchandise). The two companies were fully consolidated as of 1 January 2018. The non-controlling interest in Visier Medien Holding AG was recognised at cost until 31 December 2017.

Formations During the unbundling process, the companies RUAG GmbH, domiciled in Kassel (Germany), Base 10 GmbH, domiciled in Hallbergmoos (Germany), RUAG Ltd, based in Emmen (Switzerland), and RUAG MRO Holding Ltd and RUAG Simulation & Training Ltd, both domiciled in Bern (Switzerland), were founded in October 2019. As of 1 December 2019, RUAG GmbH and Base 10 GmbH took over certain business activities from RUAG Defence Deutschland GmbH by purchasing the business operations and the related assets and liabilities. These transactions had no significant impact on the consolidated financial statements of RUAG.

RUAG Inc., founded on 20 December 2019 and domiciled in Berlin (USA), also results from the unbundling of the corporate structure. As of 31 December 2019, this company took over the entire business activities of Mecanex USA Inc. by purchasing the business operations and the related assets and liabilities. This transaction had no significant impact on the consolidated financial statements of RUAG.

As of 17 May 2018, RUAG Slip Rings Ltd, domiciled in Nyon (Switzerland), was formed by means of a cash consideration with intended in-kind contribution. On 21 June 2018, this company concluded an agreement with RUAG Switzerland Ltd concerning the purchase of the business operations and associated assets of the "Slip Rings" business unit. The purpose of RUAG Slip Rings Ltd is to develop, manufacture, test, supply, implement and operate products in the area of slip rings. The company may establish subsidiaries in Switzerland and abroad, and acquire stakes in other companies in Switzerland and abroad. This spin-off had no impact on the consolidated financial statements of RUAG.

Effects of acquisitions of companies
in CHF m

	2019	2018
Purchase price, paid in cash	—	0
Escrow account	—	—
Contingent consideration	—	—
Total consideration transferred	—	0

There were no new acquisitions of companies in the year under review. In the previous year, "Purchase price, paid in cash" included the purchase price of the outstanding shares of Visier Medien Holding AG.

Acquired assets and liabilities recognised at the time of acquisition
in CHF m

	2019	2018
Current assets	—	1
Property, plant and equipment	—	0
Intangible assets	—	0
Deferred tax assets	—	—
Current and non-current liabilities	—	(1)
Deferred tax liabilities	—	(0)
Total acquired assets and liabilities	—	0

No acquisitions were made in the year under review. As part of the acquisition in the previous year of the outstanding shares in Visier Medien Holding AG, domiciled in Zug (Switzerland), the following valuation methods were used to calculate the fair value of the material assets and liabilities acquired:

Inventories and work in progress The fair values were determined based on the estimated selling price under normal business conditions, less the estimated finishing and sales costs as well as an appropriate profit margin based on the work required to finish and sell the inventories and work in progress.

Property, plant and equipment The fair value of property, plant and equipment was measured based on the updated replacement values, taking into account the newly estimated useful life.

Intangible assets and goodwill The publishing rights of the Visier Group were recognised at fair value in the previous year. The acquisition did not give rise to any goodwill or badwill.

Net cash outflow
in CHF m

	2019	2018
Cash consideration	4	2
Escrow account refund	(2)	—
Take-over of financial liabilities	—	—
Cash and cash equivalents acquired	—	(0)
Total net cash outflow	2	2

The considerations paid in cash amounted to CHF 3.7 million in the year under review. Under the agreements concerning the contingent consideration in connection with the acquisition of the Clearswift Group, the Group was obliged to pay an additional amount of up to CHF 7.5 million depending on the operating result achieved for the four financial years following the acquisition. At the time of acquisition, the fair value of this liability was estimated to be CHF 4.5 million. Payments of CHF 2.3 million were made in 2017 and 2018. Further payments totalling CHF 3.7 million became due in the year under review, of which CHF 0.5 million was recognised in profit or loss. Following the conclusion of open investigations existing at the time of the acquisition of the Clearswift Group, for which part of the purchase price was deposited in an escrow account, CHF 1.6 million was returned to RUAG from the escrow account.

In 2018, the considerations paid in cash include the purchase price of the outstanding shares of Visier Medien Holding AG (CHF 0.4 million), the second tranche of the contingent consideration relating to the acquisition of the Clearswift Group (CHF 1.7 million) as well as an earn-out payment of CHF 0.2 million made in relation to the 2012 acquisition of RUAG Australia PTY Ltd.

No expenses were incurred as there were no acquisitions either in the year under review or in the previous year.

Impact of the acquisitions on the Group result

The acquisition of Visier Medien Holding AG (incl. VS Medien GmbH) in the previous year did not have a material effect on the consolidated revenues or the consolidated result.

Disposals of subsidiaries and business units

RUAG Business Aviation Ltd On 2 July 2019, RUAG Business Aviation Ltd was sold to Dassault Aviation. RUAG Business Aviation Ltd was founded in the year under review as a vehicle for the sale of the Business Aviation sites in Geneva-Cointrin and Lugano-Agno, with retroactive effect from 1 January 2019. All business activities and all employees were transferred. By the time it was sold, RUAG Business Aviation Ltd generated sales of CHF 16.5 million and a negative EBIT of CHF 0.4 million.

Clearswift On 2 December 2019, the Clearswift Group was sold to the American company Help/Systems International Group Limited. By the time it was sold, the Clearswift Group generated sales of CHF 29.7 million and EBIT of CHF 4.9 million.

Operations that were sold and effectively discontinued in the year under review had the following effects on RUAG's net sales and EBIT in both the year under review and the previous year:

Net sales and EBIT of discontinued operations

in CHF m

	2019	2018
Net sales	46	73
EBIT	5	5

The disposals of assets and liabilities associated with the sales made in the year under review and the corresponding cash inflows are summarised in the following table:

Sold assets and liabilities

in CHF m

	2019	2018
Current assets	29	—
Property, plant and equipment	2	—
Intangible assets	33	—
Current and non-current liabilities [1]	(67)	—
Deferred income taxes (net)	(6)	—
Total sold assets and liabilities	(8)	—

[1] Including intra-Group loans to Clearswift and RUAG Business Aviation AG totalling CHF 29 million which were redeemed by the buyers.

Net cash inflow

in CHF m

	2019	2018
Considerations received in cash	86	—
Take-over of financial liabilities	29	—
Cash and cash equivalents sold	(17)	—
Total net cash inflow	98	—

5 Segment information[1]
in CHF m

	2019 Space	2018 Space	2019 Aerostructures[2]	2018 Aerostructures[2]	2019 MRO International[3]	2018 MRO International[3]
Order intake – third parties	343	409	283	293	213	230
Order backlog – third parties	561	593	260	276	268	293
Net sales with third parties	338	376	297	267	235	266
Net sales with other segments	1	1	2	1	8	6
Total net sales	339	377	300	268	243	272
Earnings before interest, taxes, depreciation and amortisation (EBITDA)	37	52	(13)	(8)	(44)	(17)
Depreciation, amortisation and impairment	(13)	(14)	(9)	(5)	(19)	(7)
Earnings before interest and taxes (EBIT)	24	38	(22)	(14)	(63)	(24)
Net financial result						
Share in income of associates						
Earnings (loss) before taxes						
Income taxes						
Net profit (loss)						
Net operating assets by region[5]	112	76	109	145	48	116
Net operating assets Switzerland	12	(7)	38	50	10	30
Net operating assets Rest of Europe	49	67	71	94	20	70
Net operating assets Rest of world	51	16	—	—	17	16
Property, plant and equipment and intangible assets (incl. investment properties)	76	71	36	39	34	51
Property, plant and equipment and intangible assets Switzerland (incl. investment properties)	29	28	18	24	4	6
Property, plant and equipment and intangible assets Rest of Europe	19	18	18	15	13	29
Property, plant and equipment and intangible assets Rest of world	28	25	—	—	17	16
Capital expenditures for property, plant and equipment and intangible assets (incl. investment properties)	(20)	(15)	(7)	(8)	(6)	(10)
Disposal of property, plant and equipment and intangible assets (incl. investment properties)	0	0	0	1	1	0

1 As part of the changes in the organisational and management structure from 1 January 2019 following the unbundling of RUAG, reporting is now broken down according to the "Space", "Aerostructures", "MRO International", "Ammotec" and "MRO Switzerland" segments. To allow the segments to be compared, the previous year's figures have been adjusted accordingly in the segment reporting.
2 The profitability of the Aerostructures division was seriously impacted by a number of factors during the previous year and the year under review. In the year under review, valuation allowances and impairments of property, plant and equipment and restructuring costs designed to reduce the extent of value, together with a fundamental reorientation at the Emmen aerostructures site, led to a considerable burden on the division's earnings. In the previous year, extremely low productivity levels at the Oberpfaffenhofen site and the resulting subsequent costs as well as a delay in the Hungary relocation project were responsible for this negative result.
3 The profitability of the MRO International division was seriously impacted by a number of factors during the previous year and the year under review. In the year under review, extensive valuation allowances of inventories and impairments of other assets for the Dornier 228 production programme led to major exceptional expenses. In the previous year, valuation adjustments for projects and corrections to the valuation of inventories and other assets had a negative effect on the results.
4 "Other segments" primarily comprises central services such as real estate management and IT, RUAG's corporate units and also the Cyber Security business unit. The negative result is mainly due to the costs incurred in the year under review in connection with the unbundling of the RUAG Group, partly offset by the profit realised on the sale of the Clearswift Group.
5 Net assets comprise trade receivables, prepayments to suppliers, other current receivables, tax assets, prepaid expenses and accrued income, inventories and work in progress, property, plant and equipment, investment property and intangible assets less trade accounts payable, prepayments from customers, other current liabilities, tax liabilities, deferred income and accrued expenses as well as current and non-current provisions.

2019 Ammotec	2018 Ammotec	2019 MRO Switzerland	2018 MRO Switzerland	2019 Other segments[4]	2018 Other segments[4]	2019 Total Segments	2018 Total Segments	2019 Eliminations	2018 Eliminations	2019 Group total	2018 Group total
411	469	567	741	75	80	1 893	2 221	—	—	1 893	2 221
140	208	406	424	—	—	1 634	1 794	—	—	1 634	1 794
450	420	607	588	75	81	2 003	1 998	—	—	2 003	1 998
0	0	18	21	108	136	137	166	(137)	(166)	—	—
450	421	625	609	183	218	2 141	2 165	(137)	(166)	2 003	1 998
30	38	62	86	13	36	86	186	—	—	86	186
(18)	(18)	(7)	(6)	(26)	(30)	(93)	(80)	—	—	(93)	(80)
12	20	54	79	(13)	6	(7)	106	—	—	(7)	106
										(8)	(6)
				(0)	4	(0)	4			(0)	4
										(16)	104
										(9)	(31)
										(25)	74
296	296	42	47	244	274	850	953	0	0	850	953
39	43	33	36	239	248	372	400	(1)	(2)	372	398
227	233	7	10	4	26	378	499	(0)	2	378	501
30	21	2	1	(0)	(0)	100	54	1	0	101	54
160	143	32	34	270	311	608	649	—	—	608	649
39	35	31	32	270	275	392	400	—	—	392	400
119	106	1	1	0	37	170	206	—	—	170	206
2	2	0	0	—	—	47	43	—	—	47	43
(40)	(37)	(6)	(6)	(18)	(18)	(98)	(95)	—	—	(98)	(95)
1	0	0	0	1	12	3	14	—	—	3	14

Further information on sales and customers is provided in Note 6 “Net sales”.

Products and services of the individual segments are described in Note 2.25, “Segment information”.

6 Net sales

in CHF m	2019	2018
Invoiced sales	1 991	2 003
Change in contracts under the percentage of completion (PoC) method	12	(5)
Total net sales	2 003	1 998

DDPS	641	611
Third parties	1 350	1 392
Invoiced sales by customer group	1 991	2 003

Aside from the DDPS and Airbus, RUAG has no other customer relationships that account for more than 10 % of net sales. Net sales from transactions with the DDPS are primarily attributable to the MRO Switzerland and Ammotec segments; those with Airbus are mainly attributable to the Aerostructures and Space segments.

Defence	855	878
Civil	1 106	1 125
Invoiced sales by type of use	1 991	2 003

Switzerland	738	749
Rest of Europe	938	1 004
Middle East	14	14
North America	212	166
South America	3	3
Asia/Pacific	83	63
Africa	3	5
Invoiced sales by region	1 991	2 003

Invoiced sales in “rest of Europe” primarily concern Germany, France, Great Britain, the Netherlands, Austria, Italy and Sweden.

7 Personnel expenses

in CHF m	2019	2018
Salaries and wages	(706)	(703)
Expense of benefit plans	(65)	(52)
Other social security expenses	(94)	(94)
Contract personnel	(64)	(62)
Other personnel expenses	(35)	(32)
Total personnel expenses	(964)	(942)

Overall, personnel expenses in the year under review have remained at the previous year’s level. The higher headcount at the sites in Hungary (Eger, Aerostructures division) and the USA (Decatur, Space division) was offset by a decrease in Sweden (Gothenburg, Space division) and the sale of RUAG Business Aviation Ltd (Switzerland, MRO International Division) and the Clearswift Group (UK, other segments). In connection with the regular revaluation of foreign pension plans (mainly in the Ammotec (Germany and Sweden) and Space (Sweden) divisions), pension obligations had to be increased significantly as a result of the considerably lower discount rate as at the balance sheet date. The negative effect of approximately CHF 16 million was fully recognised in the expense of benefit plans.

8 Other operating expenses, net

in CHF m	2019	2018
Premises costs	(26)	(24)
Maintenance and repairs of property, plant and equipment	(66)	(55)
Cost of energy and waste disposal	(13)	(13)
Insurance and duties	(8)	(8)
Administration and IT costs	(77)	(66)
Advertising costs	(22)	(26)
Other operating expenses	(46)	(58)
Other operating income	41	30
Total other operating expenses, net	(217)	(219)

"Other operating expenses, net" is practically at the same level as in the previous year. The increase in "Maintenance and repairs of property, plant and equipment" and "Administration and IT costs" was offset by lower other operating expenses and higher other operating income.

Higher licence fees for IT solutions used and increased costs in legal activities led to an increase in "Administration and IT costs". In addition, the unbundling of RUAG and initiated restructuring of the RUAG Group into a global aerospace group resulted in substantial exceptional expenses in the year under review. This was also reflected under "Administration and IT costs".

Due to the strategic reorientation of the RUAG Group, the Group discontinued the further development of the "Together ahead. RUAG" brand and the distribution of advertising material in the year under review, which is reflected in lower advertising costs of CHF 4 million in total compared with the previous year.

"Other operating expenses" include various adjustments and revaluations of provisions (guarantee provisions, follow-up costs as well as minor restructuring provisions, etc.). Furthermore, "Other operating expenses" also include price losses amounting to a net CHF 9 million (previous year: CHF 11 million). The price losses primarily relate to the accumulated effect of forward foreign exchange transactions, which are used to hedge transactions connected with operational business activities (hedging of future revenues or purchases of goods and services in the corresponding currencies).

The increase under "Other operating income" is primarily due to realised profits from the sale of investments. Further explanations are provided in Note 4 "Acquisitions, formations and sales of companies".

The sales of property during the reporting period (included in "Other operating income") had a positive impact on the result with CHF 1 million (previous year: CHF 8 million).

9 Research and development expenses

in CHF m	2019	2018
Total research and development expenses	173	179
Third party-financed research and development expenses	131	133
Self-financed research and development expenses	42	46

Research and development expenses include all own work and work assigned to third parties or services required from third parties that were recognised as an expense during the year under review.

10 Financial income/financial expenses

in CHF m	2019	2018
Interest income	2	3
Total financial income	2	3
Interest expense	(10)	(9)
Total financial expenses	(10)	(9)

In addition to conventional interest income/expenses, any impact on income resulting from a change in the discount rate that was reflected in the pension fund's liabilities being discounted/compounded was recognised in the previous year and shown in the net interest/financial result (CHF 2 million). In the year under review, this accounting method was changed and all effects from the usual revaluation of foreign pension plans were recorded under personnel expenses. Due to considerations of materiality, the previous year's figures were not adjusted.

11 Income taxes

in CHF m	2019	2018
Current income tax expense of the reporting period	(19)	(31)
Adjustments to current income taxes from prior periods	1	(0)
Current income tax expense	(18)	(31)
Origination (reversal) of temporary differences	7	(2)
Effect of tax rate changes	1	0
Recognition of unrecognised tax losses	2	2
Use of recognised tax loss carryforwards	(0)	(0)
Deferred tax income	10	1
Income tax expense in profit or loss	(9)	(31)

In addition, the following deferred taxes are recognised in equity:

in CHF m	2019 Before tax	2019 Tax (expense)/ income	2019 Net (after tax)	2018 Before tax	2018 Tax (expense)/ income	2018 Net (after tax)
Change in fair value of cash flow hedges	(9)	0	(9)	(7)	3	(4)
Gains and losses from cash flow hedges transferred to profit and loss	12	(1)	11	6	(1)	4
Foreign currency translation adjustments of foreign subsidiaries	(13)	0	(13)	(18)	0	(18)
Changes in equity	(9)	(1)	(10)	(20)	2	(18)

Analysis of income tax expense

The following table shows the reconciliation of expected to effective income tax expense. The applicable income tax rate for the purposes of the following analysis is the average income tax rate of the Group companies weighted by profit or loss; it is 65.4 % (previous year: 22.9 %).

in CHF m	2019	2018
Earnings (loss) before taxes	(16)	104
Expected weighted tax rate in %	65.4%	22.9 %
Expected tax income (tax expense)	10	(24)
Reconciliation of effective income tax expense		
Effect of (valuation allowances)/recognising of tax loss carryforwards from prior years	(0)	0
Effect of using unrecognised tax loss carryforwards from prior years	(0)	0
Effect of current losses for which tax loss carryforwards are not recognised	(23)	(13)
Effect of non-deductible expenses	(1)	(1)
Effect of tax-free income	6	6
Effect of income taxed at lower rates	0	0
Effect of tax rate changes	1	0
Effect of tax credits (losses) from prior periods	1	(0)
Other effects (including effect of share in profit or loss of associates)	(1)	0
Effective income tax expense	(9)	(31)
Effective income tax rate	54.7%	29.3 %

Individual countries (cantons in the case of Switzerland) operate different tax laws and different rates of tax. For this reason, the weighted average of the expected tax rate may vary between periods, which is attributable to the profits or losses generated in each individual country or canton.

Deferred tax assets and liabilities

Recognised deferred tax assets and liabilities break down as follows:

in CHF m	2019 Deferred tax assets	2019 Deferred tax liabilities	2018 Deferred tax assets	2018 Deferred tax liabilities
Assets				
Receivables and prepayments	1	2	0	2
Inventories and work in progress	5	13	5	14
Property, plant and equipment and investment property	1	18	2	17
Intangible assets	0	0	0	8
Tax loss carryforwards	9	—	9	—
Employee benefit assets	—	—	—	—
Other asset items	0	1	6	5
Liabilities				
Deferred income and accrued expenses	6	0	5	—
Current and non-current provisions	2	7	2	10
Employee benefit obligations	10	—	7	—
Other liability items	1	11	4	12
Deferred taxes before offsetting	37	51	41	69
Offsetting of deferred tax assets and liabilities	(14)	(14)	(21)	(21)
Total deferred taxes	22	37	20	48

Deferred tax assets and liabilities changed as follows:

in CHF m	2019	2018
Total deferred taxes at 1 January	(28)	(30)
Changes recognised in profit or loss	10	1
Changes in equity with no impact on profit or loss	(1)	2
Changes in the scope of consolidation	6	(0)
Foreign currency translation adjustments	(1)	0
Total deferred taxes at 31 December	(14)	(28)
of which deferred tax assets	22	20
of which deferred tax liabilities	(37)	(48)

Deferred taxes are calculated on the basis of the expected country-specific tax rates applicable at the individual companies for the relevant expected country-specific tax assets and liabilities. The tax rates used to calculate the deferred tax items do not differ materially from the respective income tax rates.

Deferred tax assets for unused tax loss carryforwards are only recognised if it is probable that they will be offset against future taxable profits.

The tax loss carryforwards are due to expire as follows:

in CHF m	2019	2018
Expiring within 1 year	—	—
Expiring in 1 to 2 years	1	—
Expiring in 2 to 3 years	1	—
Expiring in 3 to 4 years	5	1
Expiring in 4 to 5 years	4	5
Expiring in 5 to 6 years	0	—
Expiring in 6 to 7 years	0	1
Expiring in more than 7 years	147	110
Total tax loss carryforwards	158	117

Potential tax effect of tax loss carryforwards	39	28
of which recognised as deferred tax assets	9	9
of which not recognised	31	20

12 Cash and cash equivalents

in CHF m	2019	2018
Cash on hand	1	1
Demand deposits with financial institutions	236	208
Money market investments	0	0
Total cash and cash equivalents	237	209

Currencies of cash and cash equivalents

in CHF m	2019	2018
CHF	119	99
EUR	37	47
USD	42	34
SEK	31	17
GBP	4	8
Other	4	5
Total cash and cash equivalents	237	209

13 Financial assets

Current financial assets

in CHF m	2019	2018
Derivative financial instruments	5	2
Other current liabilities	0	3
Total current financial assets	5	5

Current financial assets primarily contain the positive replacement values of the open foreign currency hedging transactions (see also the information on financial instruments in Note 35, “Risk management process, financial risk management and capital management”).

As of 31 December 2019, there were also loans to third parties totalling CHF 0 million (previous year: CHF 3 million), which were provided as collateral for bank guarantees granted at a bank.

Non-current financial assets

in CHF m	2019	2018
Money market investments	0	0
Other receivables from third parties	2	2
Valuation allowances	—	—
Total non-current financial assets	2	2

Currencies of current and non-current financial assets

in CHF m	2019	2018
CHF	1	1
EUR	3	1
USD	3	4
SEK	1	1
GBP	—	0
Other	0	0
Total financial assets	7	7

The carrying amounts of the non-current financial assets are a reasonable approximation of their fair value.

14 Trade receivables, other current receivables and prepayments

in CHF m	2019	2018
Trade receivables	259	284
Trade receivables and receivables from associates	—	—
Valuation allowances	(5)	(6)
Total trade receivables	254	278
Prepayments to suppliers	26	11
Prepayments to associates	0	0
Total prepayments to suppliers	26	11
Current receivables from government bodies	11	15
Other current receivables	11	13
Total other current receivables	21	29
Total trade receivables, other current receivables and prepayments	301	317

Maturity profile of trade receivables, other current receivables and prepayments

in CHF m	2019	2018
Not past due	228	224
Past due 1–30 days	35	43
Past due 31–60 days	6	9
Past due 61–90 days	4	9
Past due 91–180 days	4	9
Past due over 180 days	23	23
Total trade receivables, other current receivables and prepayments	301	317

Currencies of trade receivables, other current receivables and prepayments

in CHF m	2019	2018
CHF	63	84
EUR	140	140
USD	86	76
SEK	6	5
GBP	1	8
Other	4	5
Total trade receivables, other current receivables and prepayments	301	317

Valuation allowances for doubtful receivables comprise specific valuation allowances for specifically identified items where there is a high risk of non-payment and global valuation allowances based on historical experience.

The allowance for receivables changed as follows:

Valuation allowances for doubtful receivables

in CHF m	2019	2018
Balance at 1 January	(6)	(8)
Increase in allowance	(3)	(2)
Utilisation of allowance	1	1
Reversal of allowance	2	3
Currency differences	0	0
Carrying amount at 31 December	(5)	(6)

Allowances for doubtful receivables are recorded in an allowance account. Changes are recognised in other operating expenses. No valuation allowances were required for financial instruments in categories other than loans and receivables at the end of the reporting period. Receivables judged to be unrecoverable are written off as realised losses.

15 Inventories and work in progress

in CHF m	2019	2018
Raw materials and supplies	338	349
Work in progress at cost of conversion	137	158
Work in progress (percentage of completion)[1]	121	125
Semi-finished goods	107	104
Finished goods	73	87
Valuation allowances	(151)	(113)
Total inventories and work in progress	625	710

[1] The key figures for work in progress, which is measured using the percentage of completion method, are explained in further detail below.

In the reporting period, a total of CHF 536 million (previous year: CHF 485 million) in raw materials and supplies, semi-finished and finished goods, and work in progress was charged to cost of materials.

Extensive valuation allowances of inventories for the Dornier 228 production programme resulted in a significant increase in the valuation allowances in the year under review. In the reporting period, inventories amounting to CHF 31 million (previous year: CHF 8 million) were written down to net realisable value, which had an impact on profit and loss.

RUAG has a stockpile for several years of operating materials and consumables for various aviation systems of the Swiss Armed Forces. This stockpile is held expressly in accordance with the requirements of the DDPS. If individual systems are decommissioned and this results in the need for a valuation adjustment, RUAG can claim the residual value from the DDPS. In the year under review, there were no significant reversals of inventory write-downs effected in prior periods. In the previous year, operating materials and consumables whose values were adjusted using a normal days-of-inventory analysis had their values increased by CHF 8 million.

Write-downs and reversals of inventory write-downs are recorded as cost of materials.

16 Percentage of Completion (PoC)

Long-term construction and service contracts

in CHF m	2019	2018
Contract sales and costs of ongoing projects at the end of the reporting period		
Aggregated contract sales at the end of the reporting period	1 699	1 605
Aggregated contract costs at the end of the reporting period	(1 355)	(1 229)
Realised margin at the end of the reporting period	344	376
Cumulative carrying amounts of ongoing projects at the end of the reporting period		
Gross amount due from customers for contract work	121	125
Gross amount due to customers for contract work	(111)	(100)
Net position	9	25
Advances received from customers relating to PoC contracts	26	25

The above table shows the aggregated sales and costs – on a cumulative basis across several periods – for the long-term construction and service contracts not yet concluded at the end of the reporting period. Projects concluded as at the end of the reporting period are not included here.

The "Gross amount due from customers for contract work" relates to long-term construction and service contracts for which the realisable order sales exceed the sales already invoiced. Long-term construction and service contracts for which the sales already invoiced exceed the realisable order sales are recognised under "Gross amount due to customers for contract work" (see Note 25 "Deferred income and accrued expenses"). In the year under review, sales totalling CHF 634 million (previous year: CHF 622 million) were recognised from long-term construction and service contracts.

As at the balance sheet date, RUAG had received advances for ongoing contract work that had not yet been invoiced totalling CHF 26 million (previous year: CHF 25 million). These advances are recognised under "Advances received from customers".

17 Property, plant and equipment

in CHF m	Plant and equipment	Other[1]	Land[2]	Buildings	Assets under construction	Property, plant and equipment
At cost						
As at 01 January 2018	547	258	75	495	74	1 450
Business combination	0	0	—	—	—	0
Eliminations from the scope of consolidation	—	—	—	—	—	—
Additions	35	17	—	2	37	91
Disposals	(9)	(11)	(1)	(1)	(0)	(23)
Reclassifications	31	8	(3)	0	(50)	(13)[3]
Foreign currency translation adjustments	(11)	(4)	(0)	(2)	(1)	(18)
As at 31 December 2018	593	268	71	495	59	1 486
Accumulated depreciation and impairment losses						
As at 1 January 2018	394	185	0	373	0	953
Business combination	—	—	—	—	—	—
Eliminations from the scope of consolidation	—	0	—	(0)	—	0
Depreciation	26	22	0	11	0	60
Impairment	0	0	—	—	0	1
Disposals	(9)	(10)	—	(1)	(0)	(19)
Reclassifications	1	(1)	—	(10)	—	(10)[3]
Foreign currency translation adjustments	(7)	(3)	(0)	(1)	(0)	(10)
As at 31 December 2018	406	195	0	372	0	974
At cost						
As at 01 January 2019	593	268	71	495	59	1 486
Business combination	—	—	—	—	—	—
Eliminations from the scope of consolidation	(1)	(6)	—	(1)	(0)	(7)[4]
Additions	43	12	0	7	28	90
Disposals	(11)	(19)	(0)	(4)	(1)	(35)
Reclassifications	12	13	0	9	(33)	0
Foreign currency translation adjustments	(10)	(4)	(0)	(2)	(1)	(17)
As at 31 December 2019	625	264	71	504	52	1 517
Accumulated depreciation and impairment losses						
As at 1 January 2019	406	195	0	372	0	974
Business combination	—	—	—	—	—	—
Eliminations from the scope of consolidation	(0)	(4)	—	(0)	—	(5)[4]
Depreciation	28	21	0	11	0	60
Impairment	5	5	—	0	—	10[5]
Disposals	(11)	(18)	—	(3)	—	(32)
Reclassifications	(0)	0	—	0	—	—
Foreign currency translation adjustments	(6)	(3)	(0)	(1)	0	(9)
As at 31 December 2019	422	196	0	380	0	997
Net carrying amounts						
As at 1 January 2018	153	73	75	123	74	497
As at 31 December 2018	187	73	71	123	59	512
As at 31 December 2019	203	69	71	125	51	520

1 Fixtures and fittings, information technology, motor vehicles and aircraft.
2 As at 31 December 2019, the book value of undeveloped land amounted to CHF 4.4 million (previous year: CHF 4.4 million).
3 In 2018, the Brunnen site was leased to third parties; as a result, the book value of the site was transferred from "Buildings" to "Investment properties" in the previous year (see Note 18 "Investment properties").
4 The sale of the Clearswift Group and RUAG Business Aviation Ltd saw eliminations from the scope of consolidation in the year under review.
5 Due to impairments at the production sites in Emmen CH (Aerostructures) and Oberpfaffenhofen DE (MRO International).

The total amount of property, plant and equipment pledged as collateral is listed in Note 32 "Assets pledged as collateral".

Leased property, plant and equipment

in CHF m	2019	2018
At cost	3	4
Accumulated depreciation and impairment losses	(3)	(4)
Carrying amount at 31 December	0	0

Leased assets are items of property, plant and equipment that satisfy the criteria of finance leases. The net carrying amounts break down among the different classes of property, plant and equipment as follows:

in CHF m	2019	2018
Plant and equipment	0	0
Other	0	0
Carrying amount at 31 December	0	0

18 Investment properties

in CHF m	2019	2018
At cost		
As at 1 January	355	351
Business combination	—	—
Eliminations from the scope of consolidation	—	—
Additions	5	2
Disposals	(3)	(10)
Reclassifications	(0)	13[1]
Foreign currency translation adjustments	—	—
As at 31 December	356	355
Accumulated depreciation and impairment losses		
As at 1 January	275	266
Business combination	—	—
Eliminations from the scope of consolidation	—	—
Depreciation	6	7
Disposals	(3)	(9)
Reclassifications	—	10[1]
Foreign currency translation adjustments	—	—
As at 31 December	278	275
Net carrying amounts		
As at 1 January	80	84
As at 31 December	79	80

[1] In 2018, the Brunnen site was leased to third parties; as a result, the book value of the site has been transferred from “Property, plant and equipment” to “Investment properties” in the previous year (see Note 17 “Property, plant and equipment”).

Investment property is measured at cost minus accumulated depreciation. The fair value of the properties set out below is calculated solely for disclosure reasons and was measured using the discounted cash flow (DCF) method.

in CHF m	2019	2018
Fair value (DCF calculation)	273	263
Rental income from investment property	21	21
Real estate expenses	14	9
of which on let property	12	6
of which on vacant property	2	1
Agreed capital commitments and commitments in respect of maintenance work	0	0
Future minimum rental income from ongoing rental contracts	109	93

Majority leased sites to third parties are classified as investment properties. There were no classification changes in the year under review. There are still six sites in Switzerland (Bern, Altdorf, Zwieselberg [Thun-Boden], Aigle, Brunnen and Wimmis).

Necessary repair measures were implemented in the year under review. These measures as well as new rental contracts and rental contract extensions led to an increase in fair value and minimum future rental income compared to the previous year.

Valuation techniques As was the case in the previous year, no fair value measurement was carried out by an external expert during the year under review. RUAG Real Estate Ltd calculates the fair value of investment property using the discounted cash flow (DCF) method.

The valuations carried out across the period under review using the DCF method are based on the current rental income. After the binding tenancy agreements have expired, both the vacancy risk, on the one hand, together with the additional/reduced rental income and inflation, on the other, are taken into account. The expected net cash flow is discounted at risk-adjusted discount rates on the valuation date. The discount rate also takes into account the location, development potential and building strategy of the investment property in question.

19 Intangible assets

in CHF m

	Patents and developments	Trademarks and prototypes	Licences and rights	Order backlog and customer relationships	ERP systems	Intangible assets in progress	Intangible Assets
At cost							
As at 01 January 2018	25	12	33	167	3	4	244
Business combination	—	—	0	—	0	—	0
Eliminations from the scope of consolidation	—	—	—	—	—	—	—
Additions	—	—	1	—	1	0	2
Disposals	—	—	(4)	—	—	—	(4)
Reclassifications	—	—	0	—	3	(3)	0
Foreign currency translation adjustments	(1)	(1)	(1)	(3)	(0)	(0)	(6)
As at 31 December 2018	24	12	30	164	6	0	236
Accumulated depreciation and impairment losses							
As at 01 January 2018	4	11	21	140	0	—	175
Business combination	—	—	—	—	—	—	—
Eliminations from the scope of consolidation	—	—	—	—	—	—	—
Depreciation	2	1	1	7	1	—	11
Impairment	—	—	0	—	0	—	1
Disposals	—	—	(4)	—	—	—	(4)
Reclassifications	—	—	0	—	—	—	0
Foreign currency translation adjustments	(0)	(0)	(0)	(2)	(0)	—	(3)
As at 31 December 2018	5	11	18	144	2	—	180
At cost							
As at 01 January 2019	24	12	30	164	6	0	236
Business combination	—	—	—	—	—	—	—
Eliminations from the scope of consolidation	(22)	(2)	(1)	(21)	(0)	—	(45) [1]
Additions	—	1	1	—	—	2	4
Disposals	—	—	(1)	—	(0)	—	(1)
Reclassifications	—	—	—	—	—	—	—
Foreign currency translation adjustments	0	(0)	(1)	(1)	(0)	(0)	(2)
As at 31 December 2019	2	10	29	142	6	2	191
Accumulated amortisation and impairment losses							
As at 01 January 2019	5	11	18	144	2	—	180
Business combination	—	—	—	—	—	—	—
Eliminations from the scope of consolidation	(4)	(2)	(1)	(6)	(0)	—	(13) [1]
Depreciation	1	1	1	4	1	—	9
Impairment	—	—	8	—	0	0	9 [2]
Disposals	—	—	(1)	—	—	—	(1)
Reclassifications	—	—	—	—	—	—	—
Foreign currency translation adjustments	(0)	(0)	(1)	(1)	(0)	(0)	(3)
As at 31 December 2019	2	9	25	141	3	0	181
Net carrying amounts							
As at 1 January 2018	22	2	13	27	2	4	69
As at 31 December 2018	19	1	12	19	4	0	56
As at 31 December 2019	0	1	4	0	3	2	10

[1] The sale of the Clearswift Group and RUAG Business Aviation Ltd saw eliminations from the scope of consolidation in the year under review.
[2] Due to impairments at the production site in Oberpfaffenhofen DE (MRO International).

Amortisation and impairment of intangible assets are reported in the consolidated income statement under “Amortisation and impairment of intangible assets”.

Goodwill The goodwill from acquisitions is offset directly against the equity at the time of acquisition. The theoretical capitalisation, based on a useful life of five years, would have the following impact on the consolidated financial statements:

Theoretical movement schedule for goodwill

in CHF m	Space	Aerostructures	MRO International	Ammotec	MRO Switzerland	Other segments	Total
At cost							
As at 01 January 2018	62	—	8	13	0	77	159
Business combination	—	—	—	—	—	—	—
Adjustments	—	—	—	—	—	—	—
Eliminations from the scope of consolidation	—	—	—	—	—	—	—
Foreign currency translation adjustments	(1)	—	(0)	(0)	0	(4)	(5)
As at 31 December 2018	61	—	8	12	0	73	154
Accumulated amortisation							
As at 01 January 2018	61	—	7	13	0	14	95
Theoretical ordinary amortisation	0	—	1	0	—	15	16
Eliminations from the scope of consolidation	—	—	—	—	—	—	—
Foreign currency translation adjustments	(1)	—	(0)	(0)	0	(1)	(2)
As at 31 December 2018	60	—	8	12	0	28	108
At cost							
As at 01 January 2019	61	—	8	12	0	73	154
Business combination	—	—	—	0	—	—	0
Adjustments	—	—	—	—	—	—	—
Eliminations from the scope of consolidation	—	—	—	—	—	(75)	(75)[1]
Foreign currency translation adjustments	(0)	—	(0)	(1)	(0)	2	1
As at 31 December 2019	61	—	8	12	0	—	81
Accumulated amortisation							
As at 01 January 2019	60	—	8	12	0	28	108
Theoretical ordinary amortisation	0	—	—	0	—	13	14
Eliminations from the scope of consolidation	—	—	—	—	—	(41)	(41)[1]
Foreign currency translation adjustments	(0)	—	(0)	(0)	(0)	—	(1)
As at 31 December 2019	60	—	8	12	0	—	80
Theoretical net book value							
As at 01 January 2018	1	—	1	0	—	63	64
As at 31 December 2018	1	—	—	0	—	45	46
As at 31 December 2019	0	—	—	0	—	—	1

[1] The sale of the Clearswift Group saw eliminations from the scope of consolidation in the year under review.

Capitalising the goodwill and amortising it over five years would have the following theoretical impact on the consolidated income statement and consolidated balance sheet:

Impact on consolidated income statement

in CHF m	2019	2018
Earnings before interest and taxes (EBIT)	(7)	106
Theoretical amortisation of goodwill	(14)	(16)
Theoretical EBIT incl. amortisation of goodwill	(21)	90
Net profit (loss)	(25)	74
Theoretical amortisation of goodwill	(14)	(16)
Theoretical net profit (loss) incl. amortisation of goodwill	(39)	57

Impact on consolidated balance sheet

in CHF m	2019	2018
Equity according to the balance sheet	1 030	1 024
Theoretical capitalisation of net book value of goodwill	1	46
Theoretical equity incl. net book value of goodwill	1 031	1 070

20 Associates

in CHF m	2019	2018
Carrying amount of interests in associates as at 1 January	41	40
Business combination	—	—
Eliminations from the scope of consolidation	(1)	—
Share in profit/loss of associates from continued operations	(0)	4
Dividends	(1)	(2)
Foreign currency translation adjustments	(1)	(1)
Carrying amount of interests in associates as at 31 December	38	41

RUAG does not hold any individually significant investments in associates. The following table shows the aggregate values of the investments in associates attributable to RUAG:

Aggregate investments of RUAG in associates

in CHF m	2019	2018
Share in profit/loss of associates from continued operations	(0)	4

Aggregate financial information for associates (100 %) is as follows:

Aggregate financial information for associates

in CHF m	2019	2018
Total assets	207	203
Total liabilities	122	126
Net assets	85	77
Net sales	165	168
Profit from continued operations	10	6

There are no contingent liabilities for RUAG relating to associates.

21 Financial liabilities

Current financial liabilities

in CHF m	Note	2019	2018
Due to financial institutions		0	31
Financial liabilities towards third parties[1]		3	8
Liabilities to associates		—	—
Financial liabilities to employee benefit funds		—	—
Lease liabilities	31	0	0
Current portion of non-current financial liabilities		—	—
Total current financial liabilities		4	38

[1] This item primarily contains the negative replacement values of foreign currency forward transactions.

Non-current financial liabilities

in CHF m	Note	2019	2018
Due to financial institutions		—	47
Financial liabilities towards third parties		1	1
Lease liabilities	31	0	0
Loans secured by property		—	—
Bond issues		—	—
Liabilities to associates		—	—
Total non-current financial liabilities		1	48

The carrying amounts of the non-current financial liabilities are a reasonable approximation of their fair value. The average rate of interest on non-current financial liabilities in the year under review was 1.1 % (previous year: 0.9 %).

Maturity structure of current and non-current financial liabilities

in CHF m	2019	2018
Up to 1 year	4	38
Up to 2 years	—	30
Up to 3 years	1	17
Up to 4 years	—	1
Over 4 years	—	—
Total financial liabilities	5	86

As at 31 December 2018, the current and non-current financial liabilities due to financial institutions contain a covenant in relation to the debt factor, expressed as a ratio of the net financial liabilities as of the reporting date (comprising all interest-bearing financial liabilities less cash and cash equivalents) to EBITDA (on a rolling basis for the previous 12 months). In addition, there were a few negative and positive covenants in line with standard market practice.

With the sale of the Clearswift Group on 2 December 2019, the existing current and non-current financial liabilities due to financial institutions as at 31 December 2018 were paid back. All covenants were fulfilled both in the previous year and in the year under review. As at 31 December 2019 , there were no more covenants in place.

Currencies of financial liabilities

in CHF m	2019	2018
CHF	0	50
EUR	2	4
USD	1	4
SEK	0	0
GBP	0	27
Other	1	1
Total financial liabilities	5	86

22 Trade accounts payable and prepayments

in CHF m	2019	2018
Trade accounts payable	120	109
Trade accounts payable to associates	0	0
Total trade accounts payable	121	109
Prepayments from customers	213	251
Prepayments from associates	—	—
Total prepayments from customers	213	251
Total trade accounts payable and prepayments	334	360

Currencies of trade accounts payable and prepayments

in CHF m	2019	2018
CHF	110	141
EUR	137	127
USD	79	81
SEK	6	6
GBP	1	2
Other	2	2
Total trade accounts payable and prepayments	334	360

23 Other current liabilities

in CHF m	2019	2018
Due to third parties	13	13
Due to associates	—	—
Due to government bodies	26	29
Due to shareholders	—	—
Due to employee benefit funds	—	—
Total current liabilities	40	42

24 Other non-current financial liabilities

in CHF m	2019	2018
Due to third parties	1	1
Due to associates	—	—
Due to shareholders	—	—
Due to employee benefit funds	—	—
Total other non-current liabilities	1	1

25 Deferred income and accrued expenses

in CHF m	2019	2018
Deferred income and accrued expenses for PoC orders	111	100
Income relating to future periods	7	31
Outstanding trade accounts payable	50	51
Personnel-related accrued expenses	22	21
Other deferred income and accrued expenses	19	18
Total deferred income and accrued expenses	210	221

26 Provisions

in CHF m

	Restructuring	Contract losses	Warranties	Holiday and overtime	Loyalty bonuses and anniversary benefits	Other	Total
Balance at 1 January 2018	7	16	12	35	15	30	115
Business combination	—	—	—	—	—	0	0
Eliminations from the scope of consolidation	—	—	—	—	—	—	—
Additions	6	6	3	20	1	15	52
Release of unused provisions	(5)	(3)	(2)	(1)	(0)	(2)	(12)
Use of provisions	(2)	(3)	(1)	(23)	(2)	(7)	(37)
Reclassifications	—	—	—	—	—	—	—
Foreign currency translation adjustments	(0)	(0)	(0)	(1)	(0)	(1)	(3)
Balance at 31 December 2018	6	16	12	31	15	35	116
Current provisions	3	14	12	31	1	24	85
Non-current provisions	3	2	0	—	14	11	31
Balance at 1 January 2019	6	16	12	31	15	35	116
Business combination	—	—	—	—	—	—	—
Eliminations from the scope of consolidation	—	—	(0)	(0)	(0)	(1)	(2)
Additions	6	10	4	19	2	13	55
Release of unused provisions	(1)	(3)	(3)	(0)	(0)	(6)	(14)
Use of provisions	(5)	(3)	(1)	(20)	(1)	(14)	(44)
Reclassifications	—	—	—	—	—	—	—
Foreign currency translation adjustments	(0)	(0)	(0)	(1)	(0)	(1)	(2)
Balance at 31 December 2019	6	20	11	29	15	27	108
Current provisions	3	18	11	29	1	17	79
Non-current provisions	3	2	0	—	14	10	29

In the year under review, a restructuring provision for the Aerostructures division totalling CHF 4 million was recognised based on the reduction of the added value determined by the Board of Directors, together with a fundamental reorientation at the Emmen aerostructures site.

The restructuring of the “Electronics” unit in the Space division is making progress. Provisions of CHF 2 million were recognised in the previous year for expenses relating to the job losses in Sweden and Finland.

In the year under review, the remaining restructuring provisions created in the Space division for the transfer of business activities were partially used. However, an amount of CHF 1 million has also been released. The provision was built in relation to the gradual transfer of the production of payload fairings and other structures from Zurich-Seebach to Emmen and the USA (Decatur, Alabama) based on the associated restructuring costs.

In the Aerostructures division, provisions totalling CHF 3 million for impending contract losses at the Emmen (Switzerland) and Oberpfaffenhofen (Germany) sites were recognised. In the MRO International division, provisions for impending contract losses in the Business Aviation segment in Germany had to be increased by CHF 3 million. Mainly due to exceptional planned cost adjustments for individual projects, the MRO Switzerland division had to create provisions of almost CHF 2 million for impending contract losses.

The warranty adjustments come within the scope of ordinary fluctuations in day-to-day business. The provisions for loyalty bonuses and anniversary benefits have remained essentially stable. The decrease in the discount rate to 0.1 % (previous year: 1.0 %) for the calculation of provisions for employees in Switzerland resulted in a slightly higher value as at the balance sheet date.

In the Ammotec division, the provision created in the previous year for streamlining the product portfolio was recognised totalling CHF 2 million. The release of the remaining provision does not affect net loss, as the value of inventories affected by the streamlining was adjusted to the same extent.

27 Employee benefit obligations

The RUAG Group maintains various defined benefit plans for employees. The main employee benefit plans are in Switzerland, Germany and Sweden, the plan in Switzerland being administered by a legally autonomous organisation.

Employee benefit plan in Switzerland All RUAG employees in Switzerland have been insured against the risks of old age, death and disability with the Group employee benefit fund VORSORGE RUAG. VORSORGE RUAG is a fully autonomous employee benefit fund set up in line with the Swiss defined contribution system. It has the legal status of a foundation. In addition to the compulsory benefits, the employee benefit fund also provides benefits over and above the compulsory minimum under the Swiss Federal Act on Occupational Retirement, Survivors' and Disability Pension Schemes (BVG). It is registered with and regulated by the Bern supervisory authority for occupational retirement schemes and foundations. VORSORGE RUAG is subject to the provisions of the BVG. Under those provisions, the management body of the employee benefit fund is also responsible for ensuring that, in the event of a deficit, restructuring measures are decided and implemented so as to restore the funding level of future employee benefits to 100 % within a reasonable period. These measures include making additional contributions to rehabilitate the fund. Key decisions concerning the benefits offered by VORSORGE RUAG are taken by the Foundation Board, which is made up of four employee and four employer representatives.

As at 1 January 2019, a new employee benefit concept entered into force. The bonuses of members with management contracts (insured until 31 December 2018 under the KADERVORSORGE RUAG plan) are now insured in VORSORGE RUAG to the amount of the target bonus (upon 100 % target achievement). As a result, KADERVORSORGE RUAG was integrated into VORSORGE RUAG on 1 January 2019.

Employee benefit plan in Germany There are pension commitments in Germany with respect to active and retired employees which cover old-age, loss of income and survivors' pensions. Benefits are essentially divided into a basic pension scheme, which – except for a few transitional arrangements – was managed by the Dynamit Nobel VVaG pension fund until 31 March 2016 and since 1 April 2016 has been managed as a defined benefit scheme of RUAG Ammotec GmbH, and a supplementary pension scheme which is run directly via RUAG Ammotec GmbH as a defined benefit scheme. The basic pension is determined by salary components up to the contribution assessment ceiling in the statutory pension insurance scheme. The supplementary pension is made up of salary-dependent contributions for remuneration components above the contribution assessment ceiling.

A three-part pension commitment has been put in place for certain management staff. This is composed of a basic pension primarily based on final salary, and two defined contribution components. The annual increment of the pension entitlement in this case is based on the bonus awarded or on a conversion of earnings into pension contributions (whereby the employees decide, within predefined limits, on the percentage to be converted) and is topped up by an additional contribution from the employer.

Employee benefit plan in Sweden The existing ITP plan was renegotiated with effect from 1 January 2007, and became a defined contribution plan (ITP 1) from that point onwards. However, all staff born before 1979 are still insured under the ITP 2 defined benefit plan. Alongside a final salary retirement pension, the plan also includes surviving dependants and disability pension cover provided by Alecta.

In addition to the defined benefit obligations, the Group provides other long-term employee benefits comprising loyalty bonuses and anniversary benefits (see Note 26, "Provisions").

The following table shows the economic benefit and economic liability at the end of the reporting year and the previous year, and the corresponding development of benefit plan expenses:

in CHF m	Surplus/ deficit in accordance with FER 26	2019 Group's economic share	2018 Group's economic share	Foreign currency translation adjustments	Year-on-year changes/ expenses for reporting period	Contribu-tions accrued for the period	2019 Expense of benefit plans in personnel expenses	2018 Expense of benefit plans in personnel expenses	2018 Expense of benefit plans in financial result
Patronal financing foundation	—	—	—	—	—	—	—	—	—
Benefit plans without surplus/deficit	—	(6)	(2)	(0)	4	48	52	51	(0)
Benefit plans with surplus	—	—	—	—	—	—	—	—	—
Benefit plans with deficit	—	—	—	—	—	—	—	—	—
Benefit plans without plan assets	—	(77)	(68)	(3)	13	—	13	0	3
Total	—	(83)	(70)	(4)	17	48	65	52	2

The assets of the patronal financing foundation were transferred in full to VORSORGE RUAG during the reporting period to finance the pension obligations. The benefit plans without surplus/deficit include the VORSORGE RUAG defined benefit plan in Switzerland and the defined benefit basic pension scheme in Germany. The recognised economic liabilities for benefit plans without plan assets, i.e. unfunded plans, amount to CHF 77 million (previous year: CHF 68 million) and mainly relate to the pension plans in Germany and Sweden.

In addition to conventional interest income/expenses, any impact on income resulting from a change in the discount rate that was reflected in the pension fund's liabilities being discounted/compounded was recognised in the previous year and shown in the net interest/financial result (CHF 2 million). In the year under review, this accounting method was changed and all effects from the usual revaluation of foreign pension plans were recorded under personnel expenses. Due to considerations of materiality, the previous year's figures were not adjusted.

The following table contains a summary of the benefit and contribution plan expenses for the reporting year and the previous year:

in CHF m	Switzerland	Abroad	2019 Total	Switzerland	Abroad	2018 Total
Contributions to benefit and contribution plans at expense of Group companies	40	9	48	39	12	50
Contributions to benefit and contribution plans from employer contribution reserves	—	—	—	—	—	—
Total contributions	40	9	48	39	12	50
+/– change in ECR from portfolio performance, impairment etc.	—	—	—	—	—	—
Contributions and change in employer contribution reserves	40	9	48	39	12	50
Decrease/increase in economic liability of Group from benefit and contribution plans without surplus/deficit	—	4	4	—	1	1
Decrease/increase in economic liability of Group (plans without plan assets)	—	13	13	—	0	0
Total change in economic impact from surpluses/deficits	—	17	17	—	1	1
Expense of benefit and contribution plans in personnel expenses for period	40	26	65	39	13	52
Decrease/increase in economic liability of Group from benefit and contribution plans without surplus/deficit	—	—	—	—	0	0
Decrease/increase in economic liability of Group (plans without plan assets)	—	—	—	—	3	3
Total change in economic impact from surpluses/deficits	—	—	—	—	2	2
Expense of benefit and contribution plans in financial result for period	—	—	—	—	2	2
Total expense of benefit and contribution plans for period	40	26	65	39	15	54

The change in recognised economic liabilities from benefit plans and paid-in employer contributions for the reporting year amount to CHF 65 million (previous year: CHF 54 million).

These are fully included in personnel expenses in the year under review, and were mostly included in personnel expenses in the previous year.

28 Share capital

The share capital comprises a total of 340,000 fully paid-up shares with a par value of CHF 1,000 each. There is no conditional share capital. All shares in RUAG Holding Ltd are owned by BGRB Holding Ltd which in turn is wholly owned by the Swiss Confederation.

29 Contingent liabilities towards third parties

in CHF m	2019	2018
Group guarantees	23	28
Total contingent liabilities towards third parties	23	28

Group guarantees are primarily performance and bid guarantees from operational business.

30 Additional contingent liabilities not stated on the balance sheet

in CHF m	2019	2018
Agreed contractual penalties (fines and premiums)	5	7
Legal proceedings	—	0
Bill commitments	—	—
Capital commitments for property, plant and equipment (incl. investment properties)	16	15
Other liabilities not stated on the balance sheet	0	2
Total contingent liabilities not stated on the balance sheet	22	24

Contractual penalties By the nature of its operations, RUAG has to deal with contractual penalties. The amounts reported reflect all agreed contractual penalties as at the end of the reporting period. These obligations are regularly reassessed. As soon as it is probable that a cash outflow will arise, a provision is recognised for it. The possibility of a cash outflow over and above the recognised provisions is currently considered improbable.

Legal proceedings Open or potential legal proceedings are handled by Corporate Legal & Secretary General and regularly monitored as to the probability of a future cash outflow. As soon as it is probable that a cash outflow will arise, a provision is recognised for it. The possibility of a cash outflow over and above the recognised provisions is currently considered improbable.

Capital commitments Capital commitments include the value of investments to which RUAG has committed as at the end of the reporting period.

31 Future minimum commitments from leasing transactions

Finance leases

in CHF m	2019	2018
Within 1 year	0	0
Later than 1 year, within 5 years	0	0
After 5 years	—	—
Total	0	0
Less future interest costs	(0)	(0)
Total lease liabilities recognised	0	0

Operating leases

in CHF m	2019	2018
Within 1 year	19	24
Later than 1 year, within 5 years	79	50
After 5 years	26	13
Total	124	87

These comprise unrecognised obligations under operating leases (including rental agreements).

32 Assets pledged as collateral

in CHF m	2019	2018
Cash and cash equivalents	0	0
Receivables and inventories	—	—
Plant and equipment	0	0
Property	2	3
Total assets pledged as collateral	3	3

33 Related party transactions

in CHF m	2019	2018
Receivables from related parties	31	47
Liabilities to related parties	(0)	(2)
Prepayments from related parties	(67)	(85)
Current liabilities to employee benefit funds	—	—
Non-current liabilities to employee benefit funds	—	—

In the year under review, CHF 31 million of receivables from related parties (previous year: CHF 47 million) and CHF 0.1 million of liabilities to related parties (previous year: CHF 0.5 million) were attributable to the DDPS. Invoiced sales to the DDPS totalled CHF 641 million (previous year: CHF 611 million) as stated in Note 6, “Net sales”. In return, the DDPS supplied materials and services totalling CHF 3 million (previous year: CHF 4 million). There were no loans between the Group companies and members of the Board of Directors. In the year under review, CHF 0.3 million (previous year: CHF 0.3 million) was generated with associates, and services with a value of CHF 6 million (previous year: CHF 5 million) were purchased.

34 Compensation of key management personnel

in CHF thousands	2019	2018
Highest overall compensation in the Executive Board according to executive pay reporting (Arts. 3 and 7 of the Management Salaries Ordinance)[1]	872	876

The overall emoluments paid to non-executive members of the Board of Directors for the year under review amounted to CHF 771,000 (previous year: CHF 741,000). The number of members of the Board, including the Chairman, amounted to 6 (previous year: 6). The overall emoluments paid to the CEO and the Group Executive Board for the 2019 financial year amounted to CHF 5,406,000 (previous year: 5,930,000).[2] The total remuneration for the CEO amounted to CHF 872,000 in the year under review (previous year: CHF 876,000).[2] Including the CEO, the Group Executive Board comprised 8 members in the year under review (previous year: 10).

Overview of compensation paid to members of the Board of Directors and the Group Executive Board:

in CHF thousands	Total 2019	Total 2018	Maximum overall compensation[3] 2019	Maximum overall compensation[3] 2018
Basic salary of Board of Directors				
Cash compensation	771	741	276	247
Total compensation paid to members of the Board of Directors[3]	771	741	276	247
Basic salary of Group Executive Board				
Cash compensation	4 071	4 071	654	585
Benefits in kind	76	93	9	9
Employer contributions to pension fund	422	491	91	80
Performance-based component, Group Executive Board				
Cash compensation	714	1 151	94	183
Employer contributions to pension fund	123	124	24	19
Other long-term employee benefits	—		—	—
Total compensation paid to members of the Group Executive Board[4]	5 406	5 930	872	876
of which cash compensation	4 785	5 222	748	768
of which benefits in kind	76	93	9	9
of which employer contributions to pension funds	545	615	115	99
of which other long-term employee benefits	—	—	—	—
Relation between performance-related component and cash compensation	18 %	28 %	14 %	31 %
Total compensation paid to members of the Board of Directors and Group Executive Board	6 177	6 671		
of which short-term employee benefits[4]	5 632	6 056		
of which employer contributions to pension funds	545	615		
of which other long-term employee benefits	—	—		

[1] As a result of a change to the reporting structure for executive pay reporting, which means that the pension fund contributions of the employer now count towards the overall emoluments, the figure for 2018 was increased by the employer pension fund contributions for the purposes of comparison and consistency.
[2] The overall emoluments are exclusive of the employer's social insurance contributions.
[3] The highest overall compensation for 2019 in the Board of Directors refers to the President of the Board of Directors.
[4] Includes cash compensation and benefits in kind.

35 Risk management process, financial risk management and capital management

Risk management process

The risk management system of RUAG differentiates between strategic and operational risks and focuses on relevant topics from the perspective of the Group and the divisions. Risks are identified, assessed and monitored in the individual divisions using a structured, bottom-up risk assessment. In order to prevent or reduce the individual risks, the appropriate measures are defined and implemented. At Group level, the aggregate risks relevant for the Group are monitored and managed by the Group Executive Board.

The risks identified are assessed in terms of probability of occurrence and impact, and are entered on the Group's risk map. This risk map is periodically discussed with the Group Executive Board, the Audit Committee and the entire Board of Directors. Depending on the way responsibilities are defined, the Group Executive Board or divisional management are responsible for the ongoing monitoring, control and management of risks. As part of this, the management is supported by the Risk Manager at group level in training sessions or moderating workshops.

Financial risk management
RUAG is exposed to various financial risks as a result of its business activities. The most significant financial risks arise from changes in exchange rates, interest rates and commodity prices. A further risk is the ability to secure adequate liquidity.

Financial risk management is a corporate function and is carried out at Group level by the Treasury department in compliance with the directives issued by the Board of Directors. The Treasury identifies, evaluates and hedges financial risks in close cooperation with the operating units (divisions).

a. Market risks
RUAG is exposed to market risks that largely relate to changes in exchange and interest rates and would therefore impact the value of the financial instruments held or the income/expenses associated with these. The Group monitors these risks continuously.

It employs a number of derivative financial instruments to manage the volatility associated with these risks. The Group's objective is to reduce – where appropriate – fluctuations in earnings and cash flows associated with changes in interest rates, exchange rates and the value of financial assets.

In compliance with Group policy, RUAG employs derivative financial instruments (e.g. foreign currency forward transactions) to manage risk. RUAG avoids any financial transaction in which the risk cannot be gauged at the time the transaction is concluded. The Group does not sell any assets that it does not own or does not know that it will own. RUAG sells only existing assets and hedges only existing transactions and (in the case of forward hedges) forecasted transactions that can be expected to materialise on the basis of past experience.

Exchange rate risk The consolidated financial statements are presented in Swiss francs (CHF). The Group is mainly subject to changes in the exchange rates of the euro, US dollar, Swedish krona and pound sterling. In the case of transaction risk, it faces the risk of fluctuations in the value of foreign currencies between the date of a contractual agreement and the actual date of payment. Accordingly, RUAG employs different contracts to compensate for exchange rate-induced changes in asset values, firm commitments and forecasted transactions. RUAG also employs forward transactions and currency options to hedge certain cash flows anticipated in foreign currency.

At the end of the reporting period and of the previous year, the following foreign currency positions were recognised in the balance sheet in relation to financial assets and liabilities:

as at 31 December 2019

in CHF m	EUR	USD	SEK	GBP	Other
Cash and cash equivalents	37	42	31	4	4
Trade receivables/other receivables	119	82	6	1	4
Other financial assets	3	3	1	—	0
Financial liabilities	(2)	(1)	(0)	(0)	(1)
Trade accounts payable/other liabilities	(64)	(26)	(11)	(1)	(3)
Other financial liabilities	—	—	(1)	—	(0)
Total foreign currency positions as at balance-sheet date from financial assets and liabilities	93	100	25	4	4

as at 31 December 2018

in CHF m	EUR	USD	SEK	GBP	Other
Cash and cash equivalents	47	34	17	8	5
Trade receivables/other receivables	134	71	5	8	5
Other financial assets	1	4	1	0	0
Financial liabilities	(4)	(4)	(0)	(27)	(1)
Trade accounts payable/other liabilities	(44)	(22)	(10)	(3)	(4)
Other financial liabilities	—	—	(1)	—	(0)
Total foreign currency positions as at balance-sheet date from financial assets and liabilities	135	83	12	(16)	6

The following currency hedging transactions existed as at 31 December:

Volume of contracts

in CHF m	2019	2018
Currency hedging contracts banks	358	322
Currency hedging contracts banks	(106)	(95)

Carrying amounts

in CHF m	2019	2018
Current financial assets	5	2
Current financial liabilities	(3)	(8)

The carrying amounts only contain the positive and negative replacement values from foreign currency forward transactions that are recognised at fair value. The following tables show the contractual due dates of the foreign currency forward transactions held by RUAG at the end of the reporting and the previous year:

as at 31 December 2019

in CHF m	Up to 1 year	Up to 2 years	Up to 3 years	Over 3 years	Total
Foreign currency forward transactions used for hedging purposes:					
Outflows	(3)	(0)	(0)	(0)	(3)
Inflows	5	0	0	—	5
	2	(0)	(0)	(0)	2

as at 31 December 2018

in CHF m	Up to 1 year	Up to 2 years	Up to 3 years	Over 3 years	Total
Foreign currency forward transactions used for hedging purposes:					
Outflows	(7)	(1)	(0)	(0)	(8)
Inflows	2	0	0	0	2
	(5)	(1)	(0)	(0)	(6)

Hedge accounting RUAG carries out foreign currency forward transactions to hedge future transactions in relation to its operational business (hedging future revenues or purchases of goods and services in the corresponding currencies); these hedging transactions have been designated for hedge accounting. The hedging reserve under shareholders' equity (other reserves) included the following as at 31 December:

in CHF m	2019	2018
Other reserves	(1)	(4)

Due to the occurrence of underlying transactions, CHF 12 million was derecognised from other reserves in equity and recognised in other operating income (previous year: CHF 6 million).

RUAG Holding Ltd provides certain foreign Group companies with loans in EUR and AUD. These loans are not hedged. As at 31 December 2019, there were loans totalling EUR 176 million (previous year: EUR 176 million) and AUD 15 million (previous year: AUD 15 million). As these loans are equity-like loans (because they are not scheduled or likely to be repaid in the foreseeable future), any foreign currency gains or losses are recognised directly in equity. The cumulative foreign exchange losses booked to equity that relate to these loans was CHF 26 million as at 31 December 2019 (previous year: CHF 25 million).

Interest rate risk RUAG is exposed to interest rate risks arising from the volatility of market interest rates. Demand deposits and money market investments are subject to an interest rate risk that can impact on net profit. Interest-bearing financial liabilities largely comprise loans from financial institutions with variable interest rates. Due to the negative interest rate policy by the Swiss National Bank and the positive net financial position as at 31 December 2019, RUAG is also exposed to the risk of negative interest rates. Negative interest paid in the year under review, as in the prior year, was not material.

Interest-bearing financial liabilities

as at 31 December, in CHF m	2019	2018
Current financial liabilities	0	31
Non-current financial liabilities	1	48
Total interest-bearing financial liabilities	1	79
Of which variable interest-bearing	1	79
Fixed through interest rate swap	—	—
Variable interest-bearing, net	1	79

Interest expense for interest-bearing financial liabilities in the year under review amounted to CHF 3 million (previous year: CHF 2 million).

Commodity price risk In buying commodities (particularly copper, lead, steel, zinc, aluminium, etc.) to be used as raw materials in production, the company is subject to a price risk. Commodity price changes can affect the gross profit margins of the operations concerned. Therefore, RUAG uses primarily lead swaps to minimise the price fluctuation risk of planned purchases.

The following hedging transactions existed as at 31 December:

Volume of contracts

in CHF m	2019	2018
Lead price hedging contracts banks	7	6

Replacement values

in CHF m	2019	2018
Positive replacement value banks	—	—
Negative replacement value banks	0	1

The following table shows an overview of the annual consumption of commodities.

Consumption

in CHF m	2019	2018
Aluminium	1	2
Lead	13	15
Copper	17	15
Steel	5	4
Zinc	3	3
Other	0	0
Total	40	39

b. Credit risk

Credit risks arise in particular when customers are not in a position to fulfil their contractual commitments. To manage this risk, the Group periodically evaluates customers' solvency. Around 32 % (previous year: 30 %) of the Group's sales are attributable to the DDPS. No other customer accounts for more than 10 % of the Group's sales, with the exception of Airbus.

Trade and other receivables from the DDPS account for around 12 % (previous year: 17 %) of total trade and other receivables as at 31 December 2019. As at the balance sheet date, there are no heavily concentrated default risks with regard to the recognised trade receivables.

The carrying amount of financial assets corresponds to the maximum credit risk and is composed as follows:

in CHF m	2019	2018
Cash and cash equivalents	237	209
Current financial assets	5	5
Trade receivables		
Other current receivables	275	306
Non-current financial assets	2	2
Total credit risk	519	522

Counterparty risk comprises the risk of default on derivative financial instruments and money market transactions and the credit risk on current account balances and time deposits. Default risk and credit risk are minimised by choosing as counterparties only banks and financial institutions that have an optimum credit rating when the transaction is concluded. These risks are regularly monitored to ensure that they remain within the prescribed parameters. Group guidelines ensure that the credit risk in respect of financial institutions is limited. At present, the Group does not expect any losses arising from counterparties' non-fulfilment of their contractual obligations.

c. Liquidity risk

Liquidity risk describes the risk that arises if the Group is not in a position to fulfil its obligations when due or at a reasonable price. Group Treasury is responsible for monitoring liquidity, financing and repayment. In addition, management controls processes and guidelines in this connection. To maintain flexibility, RUAG manages its liquidity risk on a consolidated basis, drawing on business policy, tax and financial considerations and, if necessary, various funding sources. A rolling liquidity plan is drawn up on the basis of expected cash flows and is regularly updated.

The net financial position is a key measure of liquidity management. The table below provides an analysis of the Group's net financial position by due date from the end of the reporting period to the contractual expiry date.

As at 31 December 2019

in CHF m	Up to 1 year	Up to 2 years	Up to 3 years	Up to 4 years	Over 4 years	Total
Cash and cash equivalents	237	—	—	—	—	237
Current financial assets[1]	0	—	—	—	—	0
Non-current financial assets	—	1	0	0	1	2
Current financial liabilities[1]	(0)	—	—	—	—	(0)
Non-current financial liabilities	—	—	(1)	—	—	(1)
Other non-current financial liabilities	—	(0)	(0)	(0)	(0)	(1)
Net financial position	237	1	(1)	—	0	237
Prepayments from customers						213
Net financial position excl. customer prepayments						24

As at 31 December 2018

in CHF m	Up to 1 year	Up to 2 years	Up to 3 years	Up to 4 years	Over 4 years	Total
Cash and cash equivalents	209	—	—	—	—	209
Current financial assets[1]	3	—	—	—	—	3
Non-current financial assets	—	1	0	0	1	2
Current financial liabilities[1]	(31)	—	—	—	—	(31)
Non-current financial liabilities	—	(30)	(17)	(1)	—	(48)
Other non-current financial liabilities	—	(0)	(0)	(0)	(0)	(1)
Net financial position	181	(29)	(17)	(1)	0	134
Prepayments from customers						251
Net financial position excl. customer prepayments						(117)

[1] Cash flow hedges recognised in current financial assets and liabilities are not part of the net financial position as they are not interest-bearing.

Capital management

In managing capital, RUAG's aims to ensure that the Group can continue its operating activities, that the owner receives an adequate return and that the balance sheet structure is optimised with regard to the cost of capital. In order to meet these objectives, RUAG can apply for higher or lower dividend payments, repay capital to the shareholder, issue new shares, or dispose of assets in order to reduce debt. RUAG monitors its capital structure on the basis of net financial position and equity. The net financial position is the sum of cash and cash equivalents, current and non-current financial assets minus current and non-current financial liabilities and other non-current liabilities.

36 Events after the reporting period

On 17 March 2020, the Board of Directors of RUAG Holding Ltd approved the consolidated financial statements for publication. No material events have taken place since the end of the reporting period that would have an impact on the carrying values of the assets or liabilities as at 31 December 2019. However, the global spread of COVID-19 may have an impact on the business activities conducted by the RUAG Group.

On 27 February 2020, RUAG activated its crisis unit with the aim of maintaining communication and ensuring that business activities were able to continue uninterrupted. Depending on how long the pandemic lasts and its scope, however, customers may hold off on purchasing products or cancel purchases altogether, causing order intake figures to fall.

In order to safeguard and continue their business activities, the group will be reliant on uninterrupted, ongoing production at the sites around the world and will need supply chains involving the major suppliers to remain free from bottlenecks. The effects of the pandemic could mean that production comes to a stop at the production sites if employees have to be absent or if official orders dictate stoppages. Additionally, it is not currently possible to say whether major suppliers will in fact be affected by bottlenecks. If this risk does materialise, it could result in the business activities – or key elements of them – being interrupted for an indeterminate period.

The majority of the business activities take place at the local production sites in Switzerland (Zurich, Emmen, Thun and Bern), Germany (Oberpfaffenhofen and Fürth), Sweden (Gothenburg and Linköping), Hungary (Eger and Sirok) and the USA (Decatur and Titusville). Extended interruptions to production at these sites would seriously compromise the ability to maintain supplies to the customers.

Depending on the consequences of the coronavirus pandemic and how long it lasts, business activities could be subject to significant negative effects that in turn have an undesirable impact on the assets, financial position and earnings. As things stand, it is not possible to make a reliable assessment of the financial impact that may be felt in the 2020 business year. Despite this, RUAG believes that the group will at present be in a position to continue their business activities.

The right to approve the consolidated financial statements rests with the annual shareholders' meeting.

37 Consolidated companies, associates and non-controlling interests (as at 31 December 2019)

Company	Head office	Country	Equity capital (100 %)		Shareholding	Consolidation method
RUAG Holding Ltd[1]	Bern	Switzerland	CHF	340 000 000		Full
Consolidated companies						
RUAG Switzerland Ltd	Emmen	Switzerland	CHF	112 200 000	100.0 %	Full
RUAG Ammotec AG	Thun	Switzerland	CHF	12 000 000	100.0 %	Full
RUAG Real Estate Ltd	Bern	Switzerland	CHF	8 000 000	100.0 %	Full
RUAG Ammotec Switzerland Ltd	Winterthur	Switzerland	CHF	300 000	100.0 %	Full
RUAG Environment Ltd	Schattdorf	Switzerland	CHF	100 000	100.0 %	Full
RUAG Corporate Services Ltd	Bern	Switzerland	CHF	100 000	100.0 %	Full
RUAG Ltd	Emmen	Switzerland	CHF	100 000	100.0 %	Full[4]
RUAG MRO Holding Ltd	Bern	Switzerland	CHF	100 000	100.0 %	Full[5]
RUAG Simulation & Training Ltd	Bern	Switzerland	CHF	100 000	100.0 %	Full[5]
RUVEX Ltd	Bern	Switzerland	CHF	100 000	100.0 %	Full
brings! AG	Schattdorf	Switzerland	CHF	100 000	55.0 %	Full
RUAG Slip Rings Ltd	Nyon	Switzerland	CHF	100 000	100.0 %	Full
RUAG Deutschland GmbH	Wessling	Germany	EUR	1 000 000	100.0 %	Full
RUAG Aerospace Services GmbH	Wessling	Germany	EUR	1 000 000	100.0 %	Full
RUAG Aerospace Structures GmbH	Wessling	Germany	EUR	25 000	100.0 %	Full
RUAG Defence Deutschland GmbH	Wedel	Germany	EUR	260 000	100.0 %	Full
RUAG Space Germany GmbH	Coswig	Germany	EUR	26 000	100.0 %	Full
GEKE Schutztechnik GmbH	Lichtenau	Germany	EUR	25 000	51.0 %	Full
RUAG Ammotec Deutschland GmbH	Fürth	Germany	EUR	100 000	100.0 %	Full
RUAG Ammotec GmbH	Fürth	Germany	EUR	25 000	100.0 %	Full
VS Medien GmbH	Bad Ems	Germany	EUR	25 000	100.0 %	Full
RUAG GmbH	Kassel	Germany	EUR	100 000	100.0 %	Full[6]
Base 10 GmbH	Hallbergmoos	Germany	EUR	100 000	100.0 %	Full[7]
RUAG Sweden AB	Göteborg	Sweden	SEK	100 000	100.0 %	Full
RUAG Space AB	Göteborg	Sweden	SEK	15 000 000	100.0 %	Full
Norma Precision AB	Amotfors	Sweden	SEK	2 500 000	100.0 %	Full
Gyttorp AB	Karlskoga	Sweden	SEK	701 400	100.0 %	Full
Gyttorp Cartridge Company AB	Nora	Sweden	SEK	1 000 000	100.0 %	Full
RUAG Ammotec Sweden AB	Karlskoga	Sweden	SEK	300 000	100.0 %	Full
RUAG Australia PTY Ltd.	Bayswater	Australia	AUD	10 000	100.0 %	Full
RUAG Ammotec Benelux BVBA	Boechout	Belgium	EUR	25 000	100.0 %	Full
RUAG Industria e Comercio de Municoes Ltda	São Francisco	Brazil	BRL	500 000	100.0 %	Full
RUAG Ammotec UK Ltd.	Liskeard	UK	GBP	15 000	100.0 %	Full
RUAG Space Finland Oy AB	Tampere	Finland	EUR	2 500	100.0 %	Full
RUAG Ammotec Finland OY	Malax	Finland	EUR	33 638	100.0 %	Full
RUAG Holding France SAS	Terssac	France	EUR	100 000	100.0 %	Full
RUAG Defence France SAS	Terssac	France	EUR	400 000	100.0 %	Full
RUAG Ammotec France SAS	Paris	France	EUR	1 000 000	100.0 %	Full
RUAG Ammotec Italia s.r.l.	Brescia	Italy	EUR	100 000	100.0 %	Full
RUAG Aviation Malaysia SDN BHD	Kuala Lumpur	Malaysia	MYR	1 500 100	65.0 %	Full
RUAG Ammotec Austria GmbH	Vienna	Austria	EUR	297 959	100.0 %	Full
RUAG Space GmbH	Vienna	Austria	EUR	1 500 000	100.0 %	Full
RUAG Hungarian Ammotec Inc.	Sirok	Hungary	HUF	280 000 000	100.0 %	Full
RUAG Aerostructures Hungary Zrt.	Eger	Hungary	HUF	600 000 000	100.0 %	Full

1 RUAG Holding Ltd, Stauffacherstrasse 65, CH-3000 Bern.
2 Investments of between 20 % and 50 % are measured using the equity method.
3 Non-material investments are valued at cost minus a valuation allowance.
4 RUAG Ltd, a company domiciled in Emmen (Switzerland), was formed as of 25 October 2019.
5 RUAG MRO Holding Ltd and RUAG Simulation & Training Ltd, domiciled in Bern (Switzerland), were formed as of 28 October 2019.
6 RUAG GmbH, a company domiciled in Kassel (Germany), was formed as of 14 October 2019.
7 Base 10 GmbH, a company domiciled in Hallbergmoos (Germany), was formed as of 8 October 2019.
8 RUAG Inc., a company domiciled in Berlin (USA), was formed as of 20 December 2019.

Company	Head office	Country	Equity capital (100 %)		Shareholding	Consolidation method
RUAG Ammotec USA Inc.	Tampa, FL	USA	USD	6 500 000	100.0 %	Full
Mecanex USA Inc.	Berlin, CT	USA	USD	1 500	100.0 %	Full
RUAG Holding USA Inc.	Huntsville, AL	USA	USD	0.1	100.0 %	Full
RUAG Space USA Inc.	El Segundo, CA	USA	USD	25 000	100.0 %	Full
RUAG Inc.	Berlin, CT	USA	USD	1 500	100.0 %	Full [8]
RUAG Simulation Company LLC	Abu Dhabi	UAE	AED	150 000	49.0 %	Full
Stadeln Genehmigungshaltergesellschaft mbH	Fürth	Germany	EUR	25 000	78.6 %	[3]
Associates [2]						
Nitrochemie Wimmis AG	Wimmis	Switzerland	CHF	25 000 000	45.0 %	Equity
Nidwalden Airpark Ltd	Stans	Switzerland	CHF	1 000 000	40.0 %	Equity
Nitrochemie Aschau GmbH	Aschau	Germany	EUR	7 700 000	45.0 %	Equity
Other investments						
AIONAV Systems Ltd	Muri bei Bern	Switzerland	CHF	100 000	12.0 %	[3]
Switzerland Innovation Park Biel/Bienne AG	Biel/Bienne	Switzerland	CHF	1 540 000	6.5 %	[3]
Flughafen Bern AG	Bern	Switzerland	CHF	14 310 000	1.4 %	[3]
Brünig Indoor Aktiengesellschaft	Lungern	Switzerland	CHF	3 400 000	0.3 %	[3]
Arianespace Participation	Evry	France	EUR	3 937 983	3.5 %	[3]

[1] RUAG Holding Ltd, Stauffacherstrasse 65, CH-3000 Bern.
[2] Investments of between 20 % and 50 % are measured using the equity method.
[3] Non-material investments are valued at cost minus a valuation allowance.
[4] RUAG Ltd, a company domiciled in Emmen (Switzerland), was formed as of 25 October 2019.
[5] RUAG MRO Holding Ltd and RUAG Simulation & Training Ltd, domiciled in Bern (Switzerland), were formed as of 28 October 2019.
[6] RUAG GmbH, a company domiciled in Kassel (Germany), was formed as of 14 October 2019.
[7] Base 10 GmbH, a company domiciled in Hallbergmoos (Germany), was formed as of 8 October 2019.
[8] RUAG Inc., a company domiciled in Berlin (USA), was formed as of 20 December 2019.

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Report of the Statutory Auditor to the General Meeting of Shareholders of

RUAG Holding Ltd, Bern

Report of the Statutory Auditor on the Consolidated Financial Statements

As statutory auditor, we have audited the accompanying consolidated financial statements of RUAG Holding Ltd, which comprise the income statement, balance sheet, statement of cash flows, statement of changes in equity and notes (pages 46 to 88), for the year ended 31 December 2019.

Board of Directors' Responsibility
The board of directors is responsible for the preparation of the consolidated financial statements in accordance with Swiss GAAP FER and the requirements of Swiss law. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error. The board of directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility
Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion
In our opinion, the consolidated financial statements for the year ended 31 December 2019 give a true and fair view of the financial position, the results of operations and the cash flows in accordance with Swiss GAAP FER and comply with Swiss law.

KPMG

RUAG Holding Ltd, Bern
Report of the Statutory Auditor
on the Consolidated Financial Statements
to the General Meeting of Shareholders

Report on Other Legal Requirements

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of consolidated financial statements according to the instructions of the board of directors.

We recommend that the consolidated financial statements submitted to you be approved.

KPMG AG

François Rouiller
Licensed Audit Expert
Auditor in Charge

Pascal Henggi
Licensed Audit Expert

Gümligen-Bern, 18 March 2020

Income statement for 1 January to 31 December

in CHF m	Note	2019	2018
Dividend income	2.5	82	28
Income from services		4	4
Total operating income		86	33
Personnel expenses		(0)	(0)
Other operating expenses	2.6	(17)	(12)
Impairment losses on investments	2.7	(45)	—
Total operating expenses		(63)	(12)
Operating profit/loss		23	21
Financial income			
Interest income		21	17
Currency gains		—	—
Financial expenses			
Interest expense		(12)	(7)
Currency losses		(5)	(2)
Pre-tax net profit		27	29
Income taxes		(0)	(0)
Net profit for the year		27	28

The notes to the financial statements on pages 93 to 95 form an integral part of the financial statements.

Balance sheet as at 31 December

in CHF m	Note	2019	2018
Cash and cash equivalents		79	130
Current financial assets			
Due to third parties		—	3
Due to companies in which the entity holds an investment		167	144
Other current receivables			
Due to third parties		1	1
Due to companies in which the entity holds an investment		30	29
Prepaid expenses and accrued income		—	1
Total current assets		276	308
in % of total assets		21%	22%
Financial assets			
Due to third parties		0	0
Due to companies in which the entity holds an investment [1]		389	382
Investments	2.1	640	710
Intangible assets		0	0
Total non-current assets		1 030	1 092
in % of total assets		79%	78%
Total assets		1 306	1 400
Current interest-bearing liabilities			
Due to third parties		0	30
Due to companies in which the entity holds an investment		277	281
Other current interest-bearing liabilities			
Due to companies in which the entity holds an investment		3	13
Other current liabilities			
Due to third parties		0	0
Due to companies in which the entity holds an investment		0	—
Current provisions		—	3
Deferred income and accrued expenses			
Due to third parties		0	0
Due to companies in which the entity holds an investment		3	0
Total current liabilities		283	328
Non-current interest-bearing liabilities			
Due to third parties		—	47
Total non-current liabilities		—	47
Total liabilities		283	375
in % of total assets		22%	27%
Share capital	2.3	340	340
Legal capital reserve			
Reserves from capital contributions	2.4	10	10
Legal retained earnings			
General legal retained earnings		53	51
Voluntary retained earnings			
Balance sheet profit			
Net profit brought forward		593	596
Net profit for the year		27	28
Total equity		1 022	1 025
in % of total assets		78%	73%
Total liabilities and equity		1 306	1 400

[1] Of which subordinated: CHF 27 million

The notes to the financial statements on pages 93 to 95 form an integral part of the financial statements.

1 Principles

1.1 General
The key applied accounting principles that are not stipulated by law are described below. Here it must be noted that in order to ensure its long-term success, the company has made use of the option to create and release hidden reserves.

1.2 Financial assets
The financial assets include long-term loans. Loans provided in foreign currencies are valued using the closing rates on the balance-sheet-date; in this regard, unrealised losses are recognised, while unrealised profits are not (imparity principle).

1.3 Investments
Investments are measured at cost minus the required impairment. The carrying amounts are reviewed on an annual basis with regard to their value and, if necessary, written down. The valuations are checked in accordance with the individual valuation principle.

1.4 Foreign currency forward transactions
Positive and negative replacement values of foreign currency forward transactions are not measured during their life because the net principle is applied. The contract volumes and replacement values of current transactions are listed in the notes under section 2.2.

1.5 Foreign currency valuation
Current assets and liabilities in foreign currencies are valued using the closing rates on the balance-sheet-date. Profits or losses are recognised on a “realised” basis. For non-current assets and liabilities, the lowest value principle applies; any unrealised foreign exchange losses are treated as an expense, while unrealised profits are not recognised in the income statement.

1.6 Non-preparation of statement of cash flows and additional details in the notes
As RUAG Holding Ltd prepares its consolidated financial statements in line with recognised accounting standards (Swiss GAAP FER), in accordance with the statutory provisions it has not provided details in the notes to the financial statements concerning interest-bearing liabilities and audit fees, and has not prepared a statement of cash flows.

2 Information on balance sheet and income statement items

2.1 Investments
a) Direct investments

Company	Head office	Country	Share of capital and voting rights 2019 in %	Share of capital and voting rights 2018 in %		Capital
RUAG Switzerland Ltd	Emmen	Switzerland	100	100	CHF	112 200 000
RUAG Ammotec AG	Thun	Switzerland	100	100	CHF	12 000 000
RUAG Slip Rings Ltd	Nyon	Switzerland	100	100	CHF	100 000
RUAG MRO Holding Ltd	Bern	Switzerland	100	0	CHF	100 000
RUAG Real Estate Ltd	Bern	Switzerland	100	100	CHF	8 000 000
RUAG Corporate Services Ltd	Bern	Switzerland	100	100	CHF	100 000
RUAG Ammotec Switzerland Ltd	Winterthur	Switzerland	100	100	CHF	300 000
RUAG Deutschland GmbH	Wessling	Switzerland	100	100	EUR	1 000 000
RUAG GmbH	Kassel	Switzerland	100	0	EUR	100 000
Base 10 GmbH	Hallbergmoos	Switzerland	100	0	EUR	100 000
RUAG Sweden AB	Göteborg	Sweden	100	100	SEK	100 000
Clearswift Holding Ltd	Reading	UK	0	100	GBP	1
RUAG Holding France SAS	Terssac	France	100	100	EUR	100 000
RUAG Australia PTY Ltd.	Bayswater	Australia	100	100	AUD	10 000
RUAG Aerostructures Hungary Zrt.	Eger	Hungary	100	100	HUF	600 000 000
Nitrochemie AG	Wimmis	Switzerland	0	49	CHF	1 000 000
Nitrochemie Wimmis AG	Wimmis	Switzerland	45	45	CHF	25 000 000
Nitrochemie Aschau GmbH	Aschau	Germany	45	45	EUR	7 700 000

b) Material indirect investments

Company	Head office	Country	Share of capital and voting rights 2019 in %	Share of capital and voting rights 2018 in %		Capital
RUAG Aerospace Services GmbH	Wessling	Germany	100	100	EUR	1 000 000
RUAG Aerospace Structures GmbH	Wessling	Germany	100	100	EUR	25 000
RUAG Ammotec GmbH	Fürth	Germany	100	100	EUR	25 000
RUAG Space AB	Göteborg	Sweden	100	100	SEK	15 000 000
Clearswift Ltd	Reading	UK	0	100	GBP	15 114 616

2.2 Foreign currency forward transactions

in CHF m	2019	2018
Volume of foreign currency hedging contracts with banks	358	322
Volume of foreign currency hedging contracts with banks	(106)	(95)
Volume of foreign currency hedging contracts with Group companies	74	93
Volume of foreign currency hedging contracts with Group companies	(113)	(171)
Positive replacement value banks	5	2
Negative replacement value banks	(3)	(8)
Positive replacement value Group companies	2	7
Negative replacement value Group companies	(3)	(1)
Total replacement values	0	(0)

The contract volumes represent the volume of open foreign currency forward transactions as at year-end. The replacement values only contain the positive and negative replacement values from open foreign currency forward transactions as at year-end that are recognised at fair value.

2.3 Share capital

The share capital of CHF 340 million comprises 340,000 registered shares, each with a nominal value of CHF 1,000.

2.4 Reserves from capital contributions

The reserves from capital contributions contain the premium from the non-cash contribution from the former state-owned defence company to RUAG Holding Ltd as at 1 January 1999.

2.5 Dividend income

Dividend income primarily contains the dividends from RUAG Space AB, RUAG Ammotec AG and other investments. In addition, RUAG Real Estate Ltd paid a property dividend in 2019 in connection with the distribution of the real estate operations in Zurich-Seebach. At the same time, RUAG Holding Ltd assigned the receivable totalling CHF 38.5 million, which resulted from this property dividend, to RUAG Switzerland Ltd in the form of a contribution to free reserves without consideration. Furthermore, dividend income also includes income from the sale of the Clearswift Group, RUAG Business Aviation Ltd and the liquidation of Nitrochemie AG.

2.6 Other operating expenses

in CHF m	2019	2018
Advertising costs	(2)	(3)
Administration costs	(7)	(3)
Management fees (top management costs)	(8)	(6)
Total other operating expenses	(17)	(12)

2.7 Impairment losses on investments

If events or circumstances indicate that the carrying amount may no longer be recoverable, investments are reviewed on an annual basis with regard to their value. The contribution to free reserves without consideration to RUAG Switzerland Ltd in connection with the distribution of RUAG Real Estate Ltd's real estate operations in Zurich-Seebach (see 2.5) was fully impaired in accordance with accounting standards. In the year under review, further impairment losses on investments totalling CHF 6 million were reported.

3 Further information

3.1 Full-time positions

RUAG Holding Ltd does not employ any staff.

3.2 Collateral provided for third-party liabilities

in CHF m	2019	2018
Group guarantees	117	111
Total contingent liabilities	117	111

Guarantee liabilities are primarily performance and advance payment guarantees issued as part of operational business, as well as guarantees to secure bank credit limits vis-à-vis the subsidiaries.

3.3 Events after the reporting period

No material events have taken place since the end of the reporting period that would have an impact on the carrying values of the assets or liabilities as at 31 December 2019. However, the global spread of COVID-19 may have an impact on the business activities conducted by RUAG Holding Ltd's subsidiaries.

On 27 February 2020, RUAG activated its crisis unit with the aim of maintaining communication and ensuring that business activities were able to continue uninterrupted. Depending on how long the pandemic lasts and its scope, however, customers may hold off on purchasing products or cancel purchases altogether, causing order intake figures to fall.

In order to safeguard and continue their business activities, the subsidiaries will be reliant on uninterrupted, ongoing production at their sites around the world and will need supply chains involving major suppliers to remain free from bottlenecks. The effects of the pandemic could mean that production comes to a stop at the production sites if employees have to be absent or if official orders dictate stoppages. Additionally, it is not currently possible to say whether major suppliers will in fact be affected by bottlenecks. If this risk does materialise, it could result in the business activities of subsidiaries – or key elements of these activities – being interrupted for an indeterminate period.

The majority of the subsidiaries' business activities take place at the local production sites in Switzerland (Zurich, Emmen, Thun and Bern), Germany (Oberpfaffenhofen and Fürth), Sweden (Gothenburg and Linköping), Hungary (Eger and Sirok) and the USA (Decatur and Titusville). Extended interruptions to production at these sites would seriously compromise the ability to maintain supplies to customers.

Depending on the consequences of the coronavirus pandemic and how long it lasts, business activities could be subject to significant negative effects that in turn have an undesirable impact on the subsidiaries' assets, financial position and earnings. As things stand, it is not possible to make a reliable assessment of the financial impact that may be felt in the 2020 business year. Despite this, RUAG believes that the group will at present be in a position to continue their business activities.

Proposal by the Board of Directors for the appropriation of available earnings

in CHF m	2019	2018
Balance sheet profit at the start of the financial year	593	596
Net profit for the year	27	28
Balance sheet profit at the disposal of the Annual General Meeting	620	624
The Board of Directors proposes to the Annual General Meeting the following appropriation of available earnings:		
Dividends	—	30
Allocation to general legal retained earnings	1	2
Balance to be brought forward	619	593

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Report of the Statutory Auditor to the General Meeting of Shareholders of

RUAG Holding Ltd, Bern

Report of the Statutory Auditor on the Financial Statements

As statutory auditor, we have audited the accompanying financial statements of RUAG Holding Ltd, which comprise the income statement, balance sheet and notes (pages 91 to 95), for the year ended 31 December 2019.

Board of Directors' Responsibility
The board of directors is responsible for the preparation of the financial statements in accordance with the requirements of Swiss law and the company's articles of incorporation. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The board of directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.

Auditor's Responsibility
Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion
In our opinion, the financial statements for the year ended 31 December 2019 comply with Swiss law and the company's articles of incorporation.

KPMG

RUAG Holding Ltd, Bern
Report of the Statutory Auditor
on the Financial Statements
to the General Meeting of Shareholders

Report on Other Legal Requirements

We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO) and that there are no circumstances incompatible with our independence.

In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the board of directors.

We further confirm that the proposed appropriation of available earnings complies with Swiss law and the company's articles of incorporation. We recommend that the financial statements submitted to you be approved.

KPMG AG

François Rouiller	Pascal Henggi
Licensed Audit Expert	*Licensed Audit Expert*
Auditor in Charge	

Gümligen-Bern, 18 March 2020

RUAG follows clear rules

Management and control are based on the corporate governance guidelines of SIX Swiss Exchange.

Board of Directors

The duties of the Board of Directors of RUAG Holding Ltd are governed by the Swiss Code of Obligations, the owner's strategy of the Swiss Federal Council, the Articles of Association and the Regulations Governing Organisation and Operations. The Board of Directors of RUAG Holding Ltd currently consists of six members, none of whom performed executive functions in the year under review or in the three preceding years. In addition, the members of the Board of Directors have no material business relationship with the Group. No changes to the Board of Directors were made in the year under review.

Election and term of office

The Board of Directors of RUAG Holding Ltd and its Chairman are elected by the Annual General Meeting (AGM). In accordance with the Articles of Association, the Board of Directors consists of at least three individuals. The majority of the Board's members must be Swiss nationals who are resident in Switzerland. They are elected annually and individually, and may be re-elected. RUAG does not specify an age limit for members of the Board of Directors, nor does it limit their term of office.

Departures and changes

Markus Hutter, Paul Häring and Prof. Sybille Minder Hochreutener stepped down from the RUAG Holding Ltd Board of Directors at the end of 2019. Sibylle Minder Hochreutener has moved to the RUAG MRO Holding Ltd Board of Directors. Page 8 provides a full list of all the members of the new Boards of Directors as of 1 January 2020.

Dr. Remo Lütolf, Chairman

Paul Häring, Member

Markus Hutter, Vice-Chairman

Dr. Marie-Pierre de Bailliencourt, Member

Prof. Sibylle Minder Hochreutener, Member

Jürg Oleas, Member

The following section provides information on the composition of the Board of Directors as at 31 December 2019, the individual members' functions within RUAG, their nationality and the year in which they were first elected to the Board. Information is also provided on the year of birth, on other activities and interests, on significant mandates at major companies, organisations and foundations, on permanent functions in major interest groups, and on public offices and political mandates held as at 31 December 2019.

Dr. Remo Lütolf (b.1956, Swiss), Chairman of the Board of Directors since 26 April 2018, member since 2014
Committees: member of the Audit Committee, Nomination & Compensation Committee and Strategy Committee
Significant mandates: Chairman of the Board of Directors of Meyer Burger Technology AG, Chairman of the Board of Directors of ewl Energie Wasser Luzern Holding AG, Chairman of the Board of Directors of Erdgas Zentralschweiz AG, Chairman of the Board of Directors of Park innovAARE AG, Chairman of the Board of Directors of Venture Incubator AG, member of the Board of Directors of MTE Meter Test Equipment AG, member of the Board of Economiesuisse, member of the Executive Committee of Swissmem, member of the University Council, University of Applied Sciences and Arts Northwestern Switzerland

Markus Hutter (b.1957, Swiss), Vice-Chairman since 26 April 2018, member since 2014, stepped down on 31 December 2019
Committees: Chairman of the Nomination & Compensation Committee
Significant mandates: Chairman of the Board of Directors of Hutter Dynamics AG, Chairman of the Board of Directors of ESA-Einkaufsorganisation des Schweizerischen Auto- und Motorfahrzeuggewerbes (Purchasing Cooperative of the Swiss Automotive Industry Association), member of the Board of Directors of AXA-ARAG Rechtsschutz AG, member of the Board of Directors of Identech AG, Chairman of the Patrons Committee of Technorama Winterthur

Paul Häring (b.1957, Swiss), member since 2004, stepped down on 31 December 2019
Committees: Chairman of the Audit Committee
Significant mandates: member of the Board of Directors of Loeb Holding AG, member of the Board of Directors of EMCH Aufzüge AG, member of the Board of Directors of OBAN Beteiligungen AG, member of the Board of Directors of Lüthi & Portmann Fleischwaren AG, Chairman of the Board of Directors of Lüthi Immobilien AG, Chairman of the Board of Directors of hbi invest ag, member of the Board of Directors of BioFactory Competence Center AG, member of the Board of Directors of CertX AG, member of the Board of Directors of Hochalpines Institut Ftan AG, member of the Board of Directors of CHRIST & HEIRI Holding AG, member of the Board of Directors of Walter Marolf AG, member of the Board of Directors of JJA Holding Ltd, member of the Board of Directors of Kern Holding AG, member of the Board of Directors of Velobaze AG, member of the Advisory Board of Vantage Education Ltd, Partner at Partnerstiftung awr AG für Wirtschaft und Recht, Liquidator for awr Partnerstiftung, Liquidator for Meinen Personalfürsorgestiftung

Prof. Sibylle Minder Hochreutener (b.1973, Swiss), member since 2014, stepped down on 31 December 2019
Committees: member of the Nomination & Compensation Committee
Significant mandates: member of the President's Board and Head of the Department of Business Administration at the University of Applied Sciences St. Gallen FHS, lecturer in business administration at the University of St. Gallen (HSG), member of the Board of the Association of Management Schools Switzerland (FWD), member of the Fachkommission Berufsmaturität (expert committee for vocational school-leaving examinations), Canton of St. Gallen

Jürg Oleas (b.1957, Swiss), member since 2011
Committees: Chairman of the Strategy Committee, member of the Audit Committee
Significant mandates: member of the Board of Directors of LafargeHolcim AG

Dr. Marie-Pierre de Bailliencourt (b.1970, French), member since 2018
Committees: member of the Strategy Committee
Significant mandates: member of the Board of Directors of Groupe La Poste, France

Internal organisation and tasks
The Board of Directors holds ultimate responsibility for the business strategy and overall management of the Group. Subject to the authority of the Annual General Meeting, it possesses supreme decision-making powers.

The main duties of the Board of Directors under the terms of the Swiss Code of Obligations and Articles of Association of RUAG Holding Ltd are:

- The strategic orientation and management of the Group in accordance with the owner's strategy of the Swiss Federal Council
- The structuring of the accounting system, financial controlling and financial planning
- The appointment and dismissal of the CEO, other members of the Group Executive Board and other senior executives
- Supreme oversight of business activities
- Production of the Annual Report, preparation of the AGM and implementation of resolutions passed by the latter

Decisions are taken by the Board of Directors as a whole. To assist the Board in preparing and implementing its decisions, three committees have been formed: an Audit Committee, a Nomination & Compensation Committee and a Strategy Committee. The Board of Directors has also formed an Advisory Board. Besides the usual six meetings, the Board of Directors met for a strategy meeting in summer 2019. In addition, the members of the Board of Directors discussed matters by telephone as required. The agenda for meetings of the Board of Directors is set by the Chairman. Any member of the Board of Directors may request that an item be included on the agenda. The members are provided with documentation prior to each meeting to enable them to prepare for the items to be discussed.

Committees

The Board of Directors has an Audit Committee, a Nomination & Compensation Committee and a Strategy Committee, each of which has its own Chair. The committees meet regularly and prepare business for the full Board of Directors, draft related proposals and implement resolutions of the Board of Directors as required. The agenda of each committee's meetings is set by its Chair. The members of the committees are provided with documentation prior to the meetings to enable them to prepare for the items on the agenda.

Audit Committee

The Audit Committee is composed of three members of the Board of Directors. The members of the Audit Committee are experienced in financial and accounting matters. The Audit Committee meets regularly and is convened by the Chair as often as business requires. Usually the meetings are also attended by the CEO, CFO, Vice President of Internal Audit, General Counsel and representatives of the statutory auditor.

The main task of the Audit Committee is to ensure a comprehensive and efficient audit strategy for RUAG Holding Ltd and the Group. The duties of the Audit Committee include:

- Assessing processes in the risk and control environment (internal control system)
- Monitoring financial reporting
- Assessing the internal and external auditors
- Defining and approving the focal points of the audits
- Accepting the audit report and any recommendations of the statutory auditor prior to submission of the annual financial statements (individual and consolidated) to the full Board of Directors for approval
- Submitting a proposal to the full Board of Directors as to which external auditor should be recommended to the AGM for appointment; assessing the performance, fees and independence of the external auditor and examining the compatibility of audit activities with any consultancy mandates
- Regularly examining the Compliance Management System

The Audit Committee regulates, supervises and commissions the Internal Audit. It provides the full Board of Directors with a regular report on its activities and immediately informs the Board of any important matters.

Nomination & Compensation Committee

The Nomination & Compensation Committee (NCC) is composed of three members of the Board of Directors. The NCC meets regularly and is convened by the Chair as often as business requires. The meetings are usually also attended by the CEO and the Chief Human Resource Officer.

The main task of the NCC is to propose the outlines of human resource policies and planning to the full Board of Directors and to present proposals on the selection and compensation of Group Executive Board members. This also includes preparing necessary decisions for the full Board of Directors in the areas of management development, compensation system and policies, objective setting, pension fund matters and social partnership.

Finally, the NCC is tasked with proposing the compensation of members of the Board of Directors in conformity with the guidelines set forth by the Swiss Confederation.

Strategy Committee

The Strategy Committee comprises three members of the Board of Directors. The Strategy Committee has four scheduled meetings a year, which are coordinated with the strategic and budgetary planning process.

The Strategy Committee assists the Board of Directors with its strategic duties. In particular, these include preparing for the Board's Strategy Workshop and clarifying important issues with the owner (e.g. owner's strategy of the Swiss Federal Council). The Strategy Committee prepares resolutions of the full Board of Directors relating to RUAG's strategy, its budget and multi-year plan. The meetings are usually also attended by the CEO and CFO, the Vice President Strategy & Corporate Development, and the General Counsel.

Advisory Board

The Advisory Board helps the Board of Directors and Group Executive Board to better deliberate on, prepare, implement and communicate their decisions. The Advisory Board has no executive or supervisory functions, and is not an official organ of the company. The Advisory Board held two meetings in 2019. The Board has two members: Prof. Thomas Friedli and Prof. Alexandre J. Vautravers. As a result of the RUAG Group's unbundling and the associated restructuring of the Board of Directors committees, the Board of Directors decided to dissolve the Advisory Board at the end of 2019.

Information and control instruments

The RUAG Management Information System (MIS) is structured as follows: the separate financial statements (balance sheet, income statement and statement of cash flows) of the individual subsidiaries/divisions are compiled on a monthly, quarterly, semi-annual and annual basis. These figures are consolidated for each division and for the Group as a whole and presented in comparison with the budget. The budget, which represents the first year of a rolling three-year plan, is examined in the form of a feasibility forecast based on monthly results. The CEO submits a monthly written report on budget compliance to the Board of Directors.

Compliance organisation

At Group level, Compliance & Risk Management is responsible in particular for enshrining the internal RUAG rules throughout the Group by implementing directives and holding training sessions as well as for operating the whistle-blower system. The commercial units are fully integrated in this structure through Communities of Interest for Trade Compliance and Commercial Compliance.

The Vice President Compliance & Risk Management reports to the General Counsel, who is a member of the Group Executive Board. He also reports directly and regularly to the Audit Committee and the Board of Directors, and takes part twice a year in detailed talks with the Chairman of the Board of Directors. The shareholder is provided with summary information about compliance-related topics through quarterly reports and discussions as well as through the annual report.

Whistle-blower system

RUAG has an independent reporting office, which offers employees and third parties a way to report any abuses occurring at RUAG – anonymously if desired. The reporting tool, run by an external Swiss company, is intended to function as an early warning system and to help prevent, detect and remedy any irregularities. Incoming reports are seen and processed only by designated Compliance & Risk Management specialists.

Code of Conduct for Business Partners

The Code of Conduct for Business Partners has been integrated into RUAG's General Terms and Conditions. Ever since it was founded, RUAG has been committed to conducting business in accordance with ethical principles and applicable law and in a socially responsible fashion. RUAG also expects its customers, suppliers and service providers and their supply chains to conduct themselves correctly in every respect.

"Saying no to corruption" directive

By systematically implementing the "Saying no to corruption" directive, which forms part of every RUAG employment contract, RUAG is affirming its commitment to being a fair competitor and refraining from seeking unfair advantage by providing financial or other incentives to third parties. RUAG likewise does not accept financial or other incentives in expectation of or as a reward for granting an unfair advantage.

Group Executive Board

The following section provides information on the name, year of birth, function and date of joining, as well as the external mandates, of each member of the Group Executive Board.

Urs Breitmeier (b.1963), head of the Group Executive Board, CEO of the RUAG Group, joined 2006, stepped down on 31 December 2019
External mandates: member of the Board of Directors of Calotron AG, member of the Board of Trustees of SwissSkills, member of the Advisory Board of Bern University of Applied Sciences, Deputy Chairman of the Swiss Society of Defence Technology (STA)

Dr. Peter Guggenbach (b.1962), member of the Group Executive Board, CEO of the RUAG Space division, joined 2009
External mandates: member of the Board of Aerosuisse, member of the Federal Space Affairs Commission (FSAC), Deputy Chairman of ASD-Eurospace, permanent representative of Arianespace S.A, permanent representative of Arianespace Participation

Dirk Prehn (b.1968), member of the Group Executive Board, CEO of the RUAG Aerostructures division, joined 2018
External mandates: none

Andreas Berger (b.1959), member of the Group Executive Board, CEO of the RUAG MRO Switzerland division, joined 2017
External mandates: member of the eGov Schweiz association board, member of the Management Board of ICT Switzerland, committee member of the ARCS Innovation Board

Christoph M. Eisenhardt (b.1968), member of the Group Executive Board, CEO of the RUAG Ammotec division, joined 2017
External mandates: none

Urs Kiener (b.1965), member of the Group Executive Board, CFO of the RUAG Group, joined 2002
External mandates. none

Dr. Christian Ferber (b.1965), member of the Group Executive Board, CHRO of the RUAG Group, joined 2012
External mandates: member of the Board of Directors of Schiltwald Partners AG

Dr. Judith Bischof (b. 1974), member of the Group Executive Board, General Counsel of the RUAG Group, joined 2018
External mandates: member of the Law Committee of Swissmem

Management organisation
The Board of Directors has appointed a Group Executive Board under the chairmanship of the CEO. CEO Urs Breitmeier was responsible for the day-to-day business of the company until 31 December 2019. Throughout 2019, together with the Group Executive Board, he was responsible for the overall management of the Group and for all matters not delegated to another governing body of the company by law, the Articles of Association or the Regulations Governing Organisation and Operations. The powers and duties of the Group Executive Board and CEO are set out in detail in the Organisational Regulations and in the job description of the CEO.

The members of the Group Executive Board report to the CEO.

The Group Executive Board comprises the Chief Executive Officer (CEO), the division heads, the Chief Financial Officer (CFO), the Chief Human Resource Officer (CHRO) and the General Counsel.

CEO
The CEO manages the Group. He submits the RUAG strategy, long- and medium-term objectives, and management guidelines to the full Board of Directors for their approval.

At the proposal of the CEO, the Board of Directors decides on the three-year corporate plan, annual budget, individual projects, divisional and consolidated financial statements and Group Executive Board-level human resource issues.

The CEO regularly submits reports to the Board of Directors on business performance, anticipated business matters and risks, as well as changes at the next management level.

The members of the Board of Directors may request and review further information on operations as provided by the law, the Articles of Association and the Regulations Governing Organisation and Operations.

The CEO regularly assesses whether the Articles of Association and the regulations and other guidelines issued by the Board of Directors require amendment, and applies for such amendments to be made.

Management contracts
No management contracts have been concluded by RUAG Holding Ltd and its subsidiaries with any third parties.

RUAG management structure as at 31 December 2019

Board of Directors
Dr. Remo Lütolf (Chairman), Markus Hutter[1] (Vice-Chairman), Paul Häring[1]
Prof. Sibylle Minder Hochreutener[1], Jürg Oleas, Dr. Marie-Pierre de Bailliencourt

Advisory Board
Prof. Thomas Friedli
Prof. Alexandre J. Vautravers

Audit Committee
Paul Häring (Chairman)
Dr. Remo Lütolf
Jürg Oleas

Internal Audit

Nomination & Compensation Committee
Markus Hutter (Chairman)
Dr. Remo Lütolf
Prof. Sibylle Minder Hochreutener

Strategy Committee
Jürg Oleas (Chairman)
Dr. Remo Lütolf
Dr. Marie-Pierre de Bailliencourt

CEO RUAG Group/ Corporate Services Urs Breitmeier[2]	**Space** Dr. Peter Guggenbach	**Aerostructures** Dirk Prehn	**MRO International[3]** Felix Ammann	**Ammotec** Christoph Eisenhardt	**MRO Switzerland[3]** Andreas Berger
Corporate Finance & Controlling[4] Urs Kiener	Electronics	Aerostructures Germany	Simulation & Training	Armed Forces & Law Enforcement	Land Systems
Corporate Human Resources Dr. Christian Ferber	Spacecraft	Aerostructures Switzerland	Aviation International	Hunting & Sports	Network Enabled Operations
Corporate Legal & Compliance Secretary General Dr. Judith Bischof	Launchers	Aerostructures Hungary	Business Aviation	Industry	Military Aviation
					Subsystems & Products

— Group Executive Board
1 Stepped down from the Board of Directors on 31 December 2019
2 Stepped down from the Group Executive Board on 31 December 2019
3 As of 1 January 2019, the Defence and Aviation divisions were reorganised and renamed MRO Switzerland and MRO International as part of the RUAG unbundling project.
4 Incl. Real Estate/Environment, Procurement

Compensation, profit-sharing and loans

Compensation report

The following details correspond to the guidelines of SIX Swiss Exchange concerning compensation paid to members of the Board of Directors and Group Executive Board, taking the transparency provisions of the Swiss Code of Obligations (Art. 663b^{bis} and Art. 663c) into account. Compensation paid in accordance with these provisions of the Swiss Code of Obligations is listed in the financial statements in Note 34 "Compensation of key management personnel", with further details provided.

Compensation policy

RUAG's HR policy includes the principle that employee performance and company success are the main factors that determine compensation. The policy is aimed at implementing simple, clearly structured compensation systems that ensure fair pay and are transparent for employees. RUAG bases its compensation on current levels of remuneration in the applicable market environment and reviews it regularly. Individual compensation is based on job requirements, the employee's skills and performance, and the company's financial success. Wherever possible, RUAG applies success- and performance-based compensation systems with an additional success-based variable component. These principles also apply in setting the compensation policy for the Group Executive Board, which is determined by the Board of Directors at the request of the NCC. RUAG also prepares an annual report for submission to the Swiss Federal Department of Defence, Civil Protection and Sport (DDPS), the Swiss Federal Council and the Finance Delegation of the Federal Assembly on compliance with the Federal Council's executive pay ordinance.

Board of Directors
The members of the Board of Directors receive compensation for their work that is determined annually by the AGM in accordance with the guidelines set forth by the Swiss Confederation (including upper limits for remuneration). The criteria for determining compensation paid to the Board of Directors is based on the responsibility accorded to its members, the complexity of the task, the specialist and personal demands placed on the individual and the expected average time required to fulfil the task.

Compensation consists of the following:

- Fixed fee
- Other benefits

Each member of the Board of Directors receives a fixed fee as part of his or her basic compensation. Other benefits comprise lump-sum allowances for expenses.

No compensation was paid to former Board members.

Further details of compensation paid in the year under review can be found in the financial statements in Note 34 “Compensation of key management personnel”.

Group Executive Board
The composition and amount of compensation are based on the industry and labour market environment and are regularly reviewed. To this end, publicly available information on companies of a similar size from Swiss industry and, where applicable, the results of surveys and external studies are taken into account. Overall remuneration for the CEO and for members of the Group Executive Board is subject to an upper limit approved by the Annual General Meeting.

Compensation consists of the following:

- Fixed basic salary
- Performance-based component
- Employer contributions to pension funds
- Fringe benefits

The fixed basic salary is determined primarily by the task, responsibility, qualifications and experience of the Board members, as well as the market environment. The performance-based component depends on the extent to which individual performance objectives are reached and on the company’s financial success. It consists of a one-year Short Term Incentive Plan (STI) and a three-year Long Term Incentive Plan (LTI). Targets are determined with reference to the extent to which individual performance objectives are reached, and to the company’s financial success. As part of the objective-setting process, measurable goals are set at the beginning of each year by the Board of Directors and the CEO for the members of the Group Executive Board. At the end of the financial year, the extent to which these objectives have been met is assessed.

Short Term Incentive Plan (STI) The financial success of the Group overall and of the individual divisions is measured based on five financial value drivers:

- Net sales
- Operating result (EBIT)
- Net working capital (NWC)
- Return on net operating assets (RNOA)
- Free cash flow

The target figures are set for one year and the targets are weighted according to strategic priorities. A lower and an upper threshold are defined for each of the five value drivers. If the lower threshold is not reached for the criterion concerned, the related portion of the performance-based component is omitted. However, exceeding the upper threshold does not lead to a further increase in the amount of the performance-based component. Goal attainment is weighted for the members of the Group Executive Board as follows: 20 % for the personal goals and 80 % for the financial goals. In the case of the divisional CEOs, the financial goals are defined per division. In the case of the CEO and the heads of the service units, the financial goals of the Group apply.

Long Term Incentive Plan (LTI) This remuneration component was introduced in 2013 with the aim of focusing the efforts of RUAG’s top managers on the long-term success of the business (cf. also the Swiss Federal Council’s executive pay ordinance, or “Kaderlohnverordnung”). The LTI is for members of the Group Executive Board only. The target figure used for the LTI is the Group’s cumulative net profit over the next three years (plan period), defined with a minimum value, a target value and a maximum value. Payment is made in April of the year following the plan period. Payments are conditional upon an employment relationship existing between the plan participant and RUAG at the end of the plan period.

The Board of Directors specifies the performance benchmark target for a three-year period each year on adoption of the corporate plan. At the same time, it also sets the minimum and maximum values and specifies the individual amount payable to each plan participant if the target figure is achieved. If the minimum value is not achieved, no payment will be made. If the maximum value is exceeded, the maximum amount paid will be 120 % of the specified amount. Payment will be made after the audited financial statements for the last financial year become available. A third of the LTI target value will be expensed each year depending on how the target value develops, with adjustments being made in the subsequent two years if necessary.

The total amount of the performance-based component is based on the extent to which the STI and LTI plan objectives are met. For the members of the Group Executive Board, the performance-based component in 2019 ranged from 11 % (previous year: 10 %) to a maximum of 30 % (previous year: 42 %) of the annual cash remuneration. The LTI component was removed on 31 December 2019 due to the unbundling of the RUAG Group.

Other benefits
Other benefits comprise employers' contributions paid to social security funds and for mandatory and extra-mandatory employee benefits. The same regulations on expenses apply for the members of the Group Executive Board as for all other employees of the Group. Additional regulations also apply to the members of the Group Executive Board and all members of management in Switzerland concerning a lump-sum allowance for representation and other incidental expenses. Both regulations have been approved by the cantonal tax authorities concerned. A company car is provided to each member of the Group Executive Board. No compensation was paid to former Group Executive Board members. Further details of compensation paid in the year under review can be found in the financial statements in Note 34 "Compensation of key management personnel".

Severance payments: No severance payments were made to departing members of the Board of Directors or of the Group Executive Board.

Shares and options: No shares and/or options are allocated to members of the Group Executive Board or Board of Directors.

Additional fees: During the 2019 financial year, the members of the Group Executive Board and Board of Directors received no appreciable fees or other compensation for additional services rendered to RUAG Holding Ltd or any of its subsidiaries.

RUAG and its subsidiaries have not provided any securities, loans, advances or credits to the members of the Group Executive Board or Board of Directors and related parties, nor waived any amounts receivable from them.

Capital structure
The share capital of RUAG Holding Ltd amounts to CHF 340 million, comprising 340,000 fully paid-up registered shares, each with a par value of CHF 1,000. As at 31 December 2019, RUAG Holding Ltd did not have any conditional or authorised capital, nor had it issued participation or dividend right certificates. The registered shares of RUAG Holding Ltd are not listed.

Changes in capital
No changes in capital were decided upon in the last three reporting periods.

Shares, share register
At the AGM of RUAG Holding Ltd, each registered share carries one vote. The voting right may only be exercised provided that the shareholder is recorded in the RUAG Holding Ltd share register as a shareholder with voting rights. The registered shares carry full entitlement to dividends.

In place of shares, the company may issue certificates. It may also elect to issue neither shares nor certificates. In this case, the shareholder is entitled at any time to demand issuance of a statement of shares held.

The Board of Directors keeps a register of shareholders.

Shareholder structure

Shareholder
Since 4 November 2019, BGRB Holding Ltd has held 100 % of the shares in RUAG Holding Ltd and thus all voting rights in RUAG Holding Ltd. BGRB Holding Ltd is held by the Swiss Confederation. The Swiss Federal Department of Defence, Civil Protection and Sport (DDPS) and the Swiss Federal Finance Administration (FFA) exercise the Confederation's shareholder interests.

Owner's strategy of the Swiss Federal Council
In its owner's strategy, the Federal Council lays down strategic objectives for its shareholding in RUAG Holding Ltd, specifically strategic focal points, human resource policy and financial objectives, cooperation and investments and reporting to the Swiss Federal Council.

The 2016–19 owner's strategy of the Swiss Federal Council entered into force on 1 January 2016. It establishes the transparent, binding framework which enables RUAG Holding Ltd and its subsidiaries to fulfil their duties on a commercial basis while taking account of broader interests. The owner's strategy is enshrined in the Articles of Association of RUAG Holding Ltd. The new owner's strategy for 2020 is based on BGRB Holding Ltd and, indirectly, on the sub-holdings RUAG Holding Ltd and RUAG MRO Holding Ltd.

Cross-shareholdings
The Group has not entered into any cross-shareholdings with other companies, either in terms of capital or votes.

Participation rights of shareholders

Voting right
At the AGM of RUAG Holding Ltd, each registered share carries one vote. A shareholder may be represented by another shareholder only by written proxy.

Statutory quorums
The following resolutions are subject to decision by qualified majority in accordance with the Swiss Code of Obligations (Art. 704 CO):

- Amendment of the company's objects
- Introduction of shares with preferential voting rights
- Restriction on the transferability of registered shares
- Authorised or contingent capital increase
- Capital increase funded by equity capital, against contributions in kind or to fund acquisitions in kind and the granting of special privileges
- Restriction or cancellation of subscription rights
- Relocation of the company's registered office
- Dissolution of the company or liquidation

Convening the AGM
The AGM is convened and its agenda set as governed by law and by the Articles of Association.

Change in control and defensive measures

Obligatory offer for sale
The Articles of Association contain no provisions concerning opting-out (Art. 125 paras. 3–4 of the Financial Market Infrastructure Act – FinMIA) or opting-up (Art. 135 para. 1 FinMIA).

Change of control clauses
Any disposal of the capital or voting majority of the Swiss Confederation in RUAG Holding Ltd to third parties requires the approval of the Federal Assembly (by simple federal decree, not subject to referendum, Art. 3 para. 3 of the Federal Act on Federal Armaments Companies). Existing agreements and plans do not contain any change-of-control clauses in favour of the members of the Board of Directors and/or of the Executive Board or other executives of RUAG Holding Ltd.

Pension fund
The VORSORGE RUAG pension fund cover ratio as at 31 December 2019 was 106.9 % (previous year: 101.1 %). The fund's financial situation has thus remained stable despite low interest rates in the financial markets.

Statutory auditor

Duration of mandate of auditor in charge
At the Annual General Meeting of 2 May 2019, KPMG Ltd, Bern was elected as RUAG's statutory auditor for a further year. François Rouiller acts as lead auditor and is responsible for the audit mandate.

Audit fees and additional expenses
KPMG provided the Group with services in the amount of CHF 1.4 million (previous year: CHF 1.2 million) during the 2019 financial year related to the audit of the financial statements of RUAG Holding Ltd and its subsidiaries and of RUAG's consolidated financial statements.

In addition, KPMG provided RUAG with audit-related services, tax advice and due diligence services in the amount of CHF 0.5 million (previous year: CHF 0.2 million).

Supervisory and control instruments
The Audit Committee of the Board of Directors assesses the performance, fees and independence of the statutory auditor each year and submits a proposal to the Board of Directors as to which external auditor should be recommended to the AGM for appointment. On 2 May 2019, the AGM reappointed KPMG as the statutory auditor. The Audit Committee annually reviews the scope of external auditing, the auditing plans and the relevant processes, and discusses the audit results with the external auditor in each case.

Information policy
The Group pursues an open information policy in relation to the public and to the financial markets. The published figures extend beyond the statutory requirements in terms of transparency. Quarterly discussions are held between the shareholder and the Board of Directors.

Fees paid to KPMG

in CHF 1 000	2019	2018
Audit fees	1 435	1 184
Tax advice	462	61
Due diligence services	—	—
All other services	72	119
Total fees	1 969	1 364

Key dates

End of financial year	31 December 2019
Annual press conference	6 May 2020
AGM	17 June 2020

The Annual Report containing the financial statements for the year ended 31 December 2019 is sent to the shareholder together with an invitation to the AGM.

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